Taking Dual Enrollment Deeper: Supports for the "Forgotten Middle" in a Tenth Grade Classroom

Jack Leonard

Leadership in Education

Graduate College of Education

University of Massachusetts Boston

Jack.Leonard@umb.edu

Presented at the annual meeting of the American Educational Research Association in Denver Colorado May 4, 2010

ABSTRACT

This qualitative research study examined the supports required for 31 academically average 10th grade students to succeed on three dual enrollment college courses. Conceptually, support was a team effort, with contributions considered from administrators, faculty, parents and students. The paper documents support contributions from all four teams of people, with significant evidence that students were developing important college readiness skills. Support mechanisms included such things as a learning community model, a stretched curriculum, reduced tuition fees, an interdisciplinary integrated curriculum, team-teaching, classroom accommodations and a nofailure rule. One unexpected finding was that tuition fees greatly increased parental support.

INTRODUCTION

High schools and institutions of higher education share many strategies to help secondary students make the transition to college expectations, including advanced placement courses, the international baccalaureate curriculum, dual enrollment and early college programs. This paper explores a new, enhanced dual enrollment program in a suburban high school in Amesbury Massachusetts, which targeted academically average 10th grade students and asks, "What supports are required for student success?" The name of this program is the Amesbury Early College (EC) program.

PROBLEM

There is growing concern that many high school graduates are not ready for college, despite twenty-five years of standards-based reform (Conley, 2005; Kirst, 2008). While many more students are going off to college, too many fail the college placement exams and waste valuable time and money taking non-credit-bearing remedial courses. Some drop out along the way; others delay going to college after high school, thus endangering their chances of success. The Amesbury EC program is attempting to "stack the deck" so that students will be familiar with the culture of the college, confident with college expectations, and will have accumulated so many credits that it is unlikely they will delay or defer attending college.

A second problem, which is readily apparent at Amesbury High School (AHS), is that the college readiness courses – both dual enrollment and advanced placement (AP) courses – are typically accessed by only the academically top 25 percent of high school students. (Dual enrollment courses are first-year college courses offered right on the high school campus. Such courses may be taught by college faculty, high school faculty in an adjunct role, or even online.) In general, the same students who take AP courses are the ones who enroll in dual enrollment courses. One example of how college access programs tend to target the top academic students in high school is a recent initiative by the National Center on Education and the Economy in eight states, funded by the Bill and Melinda Gates Foundation, which will send academically qualified students directly into college after the completion of grade 10 (Rodriguez, 2010). Students will

qualify through rigorous testing, so the program makes no claims for equitable access. The EC program deliberately recruits academically average high school students by targeting students in the middle two quartiles of their school.

The final problem, which is particularly relevant for this paper, addresses the support required to help students succeed with college-level work, especially those who are young (grade 10) and academically under-performing. Last year, 71 percent of students who took an AP examination in Massachusetts passed with a score of "3" or better (which is the common benchmark for college credit although many colleges require a higher score) (College Board, 2010). In the same year, 68 percent of students who took the US History exam in Massachusetts – a test often taken by 10th graders – passed with a score of "3" or better (on a scale of 1 to 5). One can safely assume that the strongest academic students in Massachusetts participated in these tests and that some students were older than grade 10. This leaves many high school sophomores who struggle with college-level work. Not enough is known about the support required for young student success. This paper will help address that gap.

PURPOSE

The purpose of this research is to examine the implementation of a dual enrollment program for average students in the 10th grade of a suburban high school and to provide an early report on the requirements and strategies for student success. Logically, such a report should come at the end of the school year when all the results are in. However, this early report will enable the planning team to make programmatic decisions, which will affect both returning students and the second cohort of in-coming sophomores. Since the second cohort is now being recruited, this report will inform recruitment efforts, the orientation of new students, and the support structures in place for next year.

RATIONALE/IMPORTANCE

There is no shortage of literature on dual enrollment programs and case studies such as this one often have limited generalizability. However, the uniqueness of the EC program calls for close inspection. Unlike most early college high schools, which are non-traditional and small, the EC program operates within a mainstream high school and promises to expand. Unlike most dual enrollment programs, which target top students in grades 11 and 12, the EC program targets academically average students and begins in grade 10. There are enough interesting differences to call for evaluation.

Furthermore, while the outcomes and benefits of dual enrollment programs are well understood, there is less understanding of the ground-level conditions that make for successful programs. This is due, in part, to the complex nature of inter-agency collaborations. This program evaluation addresses this gap.

Of particular significance for practice in the field is to better understand local conditions – city, school district, college, community – that have prompted the formation of partnerships and sustained them without state funding.... Some public institutions in Massachusetts have continued to serve high school students although the state's dual enrollment appropriation that reimbursed institutions for tuition was defunded. (Hoffman & Robins, 2005, p. 13)

For these reasons, this study will interest secondary school leaders, such as those in neighboring towns who are hoping to replicate the Amesbury model. This study will also inform administrators at two and four-year colleges, state-level leaders who support dual enrollment programs, and policy-makers such as those at Jobs for the Future who seek to improve achievement and opportunities for young people.

Finally, the author of this paper was a high school principal not too long ago and he still remembers the plea of teachers who were struggling for student success: "I need support!" This paper is about support – for students, teachers and parents.

CONTEXT

Amesbury High School (AHS) is the sole high school in a suburban town of 15,000 people located in the Northeastern corner of Massachusetts. According to the state records, there are 674 high school students in grades 9 through 12 this year who are 7.4 percent minority, 21.2 percent low income, 14.4 percent with special needs and less than 1 percent with limited English proficiency (MA Dept. of Elementary and Secondary Education, 2010b). The high school offers AP courses in Statistics, Calculus, Music Theory, Literature, Spanish and US History in grades 11 and 12. In addition, they have offered numerous dual enrollment courses with Northern Essex Community College (NECC) for fifteen years as well as a smaller dual enrollment program with Salem State College. Classes at AHS are offered at three levels: AP (the highest), followed by Honors and College Prep. The school follows a 4x4 block schedule with classes of 90 minutes each; most courses last one quarter (10 weeks) or one semester (20 weeks).

In June 2009, there were 145 graduates with 66.9 percent signaling intentions to attend a 4-year college, 20.7 percent declaring plans for a 2-year college or trade school and 11.8 percent heading for work or the military (MA Dept. of Elementary and Secondary Education, 2010a). (Unfortunately, data on actual matriculation and four-year persistence rates for AHS were not available). The school has made Adequately Yearly Progress under the NCLB guidelines in both Math and English for the past six years (MA Dept. of Elementary and Secondary Education, 2010b).

In 2009, the high school ranked number 125 on the state graduation exam (MCAS) out of 353 state high schools, on a par with other suburban schools such as Auburn, Danvers, Foxborough, Hanover, Marshfield, Melrose, Nantucket, Northampton, North Andover, Norton,

and Pembroke (Schooldigger, 2010). By all outward appearances, this is a traditional, happy high school that is the pride of the town.

The Amesbury EC program grew out of the 15-year-old dual enrollment partnership with NECC. Leaders worried about college readiness and believed that an "early college" experience would address the need. (Early college high schools combine high school and college, so all students begin taking college coursework early and often graduate with both a high school diploma and one or more years of college credit). A planning team evolved that included two college administrators, the district superintendent and director of curriculum, the high school principal and the guidance director; later, one outside university researcher was added for the purposes of documentation and evaluation (the author of this report). The committee crafted the following goals:

- More AHS students will earn college credit before high school graduation
- More AHS students will take AP courses at the high school in their junior and senior years
- More AHS students will attend college after high school graduation
- Fewer AHS students will need remedial coursework when they attend college
- More AHS students will complete a college certificate or degree within four years of graduating from high school

College readiness was fundamental to all these goals. They focused on measurable outcomes and placed no cap on the number of students who might eventually benefit from the EC program. The principal's long-range goal was that all students would participate.

Over time, a pilot program that would target academically average students in the 10th grade took shape. The final plan provided a learning community where classes were team-taught; one high school teacher was in the classroom every day and two college faculty members alternated days. The college coursework was carefully integrated with the high school curriculum, so academic standards for both institutions were fully addressed. Students took college courses in American Literature, US History and College Success (a course that emphasized planning, time management, how to be a self-directed learner and college-level reading and writing skills). The College Success course was fully integrated with the other two courses, so students actively applied the new skills as they learned them. In contrast to other courses at AHS, the integrated learning community courses ran all year, every day, during the second block. Students engaged the college curriculum, but they had twice as much time to succeed. They also had more support. Their academic transcript at the community college was indistinguishable from that of any college adult, facilitating any future transfer of credits.

In spring 2009, the EC program was pitched to the freshmen class and their parents. The entire class was tested for reading and writing (using the *Scholastic Reading Inventory* and a home-grown writing assessment). Students who were passing freshman English and could

demonstrate reading proficiency were eligible for the program. Applicants for the EC program were given the standard NECC college placement exam in English (the *Accuplacer*; such testing is a state requirement for all entering college students). The purpose of this latter test, however, was not to screen out students but to gather data for comparison purposes later. Academically-average middle students were actively recruited. The guidance office focused on students who took College Prep classes, had passable marks, and could read well. In the end, 31 students were chosen to begin classes in September 2009. The composition of this final cohort is summarized in Table 1 below.

Table 1: Demographic Comparison of EC students and Grade 10

	All 10 th Graders	Early College Students
Number	159	31
Gender	53% boys	61% boys
Race	90% White	87% White
Special Needs	11%	0%
English Language Learners	0%	0%
Low Income	19%	16%
Average Age at start of year	15 years, 8 months	15 years, 8 months

If there are 40 students in each quartile of grade 10, then there are 80 students in this "middle group," of which 31 volunteered for the EC program.

The plans for grades 11 and 12 are still being formulated. Preliminary program assessment will provide guiding information for the next cohorts of sophomores, as well as useful information for grades 11 and 12. The first evaluation on the EC program (Leonard, 2010) sought to answer the following questions:

- 1. Do the 31 students in the EC Program truly represent the academically-average students in the high school? The null hypothesis is that there was no significant difference between the 31 EC students and the middle two quartiles of the sophomore class.
- 2. To what degree are the college courses, taught in the EC program, equivalent to courses of the same title that are regularly taught to post-secondary students on the NECC campus?
- 3. What are the academic outcomes for theses 31 students, both in the college courses and in their regular high school courses? In light of the academic load, how are they faring emotionally and psychologically?

The first two questions were considered important to establish the truthfulness of the claims of the EC program. If the 31 students turned out to be "cream-of-the-crop" students or if the so-called college courses were actually watered-down versions, then the EC program would be less

compelling. The third asked the critical question: "Are they surviving?" For all three questions, the answers were extremely encouraging. The 31 students did represent the middle two quartiles of the 10th grade on multiple data points. For example, a t-test comparison of scaled scores on the 8th grade English Massachusetts Comprehensive Assessment System (MCAS) demonstrated that there was no significant difference between the EC students and the middle two quartiles of the school ($t_{(74)} = -.26$, p > .05) (Leonard, 2010). An examination of course content, materials, instructors, assignments and assessments determined that the college courses were "stretched," in that the students had a full year (twice the normal time allotment) to complete the courses, but they actually faced more content, more assessments, more projects and more work than regular campus college students. In short, the college courses were true, rigorous college experiences. Finally, data collected at the mid-year point determined that 100 percent of the students were passing the courses, with grades ranging from A's to D's. Just as important, there was ample evidence that students were consciously developing true college readiness skills (see below). The students were committed to completing the courses. They were proud of their involvement; many were looking forward to the EC program in grade 11. There were some indications that the challenge of college coursework was having a positive effect on their overall grade point average, their behavior and their engagement in extracurricular activities. Given the early successes of the EC program, this paper attempts to identify the supports that have made this possible.

LITERATURE REVIEW

College Completion

The low rate of college completion is a national problem. According to the latest information from National Center for Education Statistics, "Approximately 58 percent of first-time students seeking a bachelor's degree or its equivalent and attending a 4-year institution full time in 2000-01 completed a bachelor's degree or its equivalent at that institution within 6 years" (Fast Facts, 2010). The Amesbury research team was interested in factors that promised to raise the completion rate. Research indicates that if young people begin college full-time, instead of part-time, they are far more likely to complete college (Adelman, 2006; Karp, Calcagno, Hughes, Jeong, & Bailey, 2007). Preliminary evidence also suggests that if students accumulate between 12 and 20 college credits while still in high school, they are more likely to enter and complete college in four years (Adelman, 2006; Karp, et al., 2007). This would suggest that an effective dual enrollment program for college readiness would maximize credit accumulation.

College Readiness

Many students lack the proper skills to succeed in college. Conley defines four kinds of college readiness skills needed for a successful transition from high school to college (Conley, 2008, p. 1):

- a. Cognitive strategies, such as "analysis, interpretation, precision and accuracy, problem solving, and reasoning."
- b. Content knowledge, with an emphasis on the "big ideas of each content area" as well as writing skills.
- c. Academic behaviors, such as "time management, strategic study skills, and awareness of one's true performance, persistence and the ability to utilize study groups.
- d. Contextual skills and knowledge, which address the foreign application and acclimatization aspects of the college environment.

Many students enter college unequipped with these skills and, without support, they fail and drop out. The theory of the EC program was that if students were supported in high school instead, where personalized services are far more available and the connection to the home were still intact, students could develop the college readiness skills that would lead to success in college.

Sophomore Expectations

There is some evidence that 10th grade students can succeed with college work. For example, the 4th Annual AP Report to the Nation reveals that over 80 percent of the AP World History exams taken in 2007 were completed by students in grade 10 or less (College Board, 2008). However, AP tests are usually taken by the best students in the best schools; for this reason, these results do not predict how average students will do with college work.

Some high schools across the country have enrolled sophomores in dual enrollment classes. Some of these are very selective, such as the Collegiate High School (CHS) in Niceville Florida, which suggests that applicants have a 3.0 grade point average (a B average) and offers an 18-page application package ("Collegiate High School at Northwest Florida State College," 2009). The Florida Atlantic University accepted 11 students in grades 10 through 12 out of 165 applicants for the opportunity to attend high school on the college campus with a college curriculum (Wright & Bogotch, 2006). On the other hand, many newer early college high schools are following the model of the Middle College High School at LaGuardia Community College in New York City, first established in 1974, which targets very ordinary, struggling urban high school students (Born, 2006).

The Forgotten Middle

The students targeted in the EC Program have been the particular passion of M. C. Swanson, who has worked on behalf of what she calls the "forgotten middle" for two decades (Delisio, 2009; Swanson, 2005). In the rush to provide services to students at the extremes (special education plus the gifted and talented), these students have been overlooked. This list of identifying characteristics is adapted from her discussions (Delisio, 2009; Swanson, 2005); the "forgotten middle" high school student:

• Comes to school regularly

- Seldom gets into trouble
- Never signs up for Honors classes
- Earns C-grades in classes that rigor
- Sits in the back of the classroom
- Rarely raises a hand or does anything to draw attention
- Parents are overworked with little time to advocate for children
- May move on to a community college and quit after a few courses
- May be first in the family to attend college

As Swanson says, "Their parents and teachers are content that they are making it through and no alarm bells are going off. They constitute a large part of the middle two quartiles of students. They'll graduate, but won't be prepared for college" (Swanson, 2005, p. 31). These were the target students for the Amesbury EC program. "While dual enrollment programs have historically been meant for advanced students, recent data show that the counterintuitive method of placing lower achieving youths in similar programs is paying off" (Killough, 2009).

Models of Support

While much has been written on dual enrollment as a support mechanism for success at a later date in college, especially with urban high school students (Adelman, 2006; Bailey, Hughes, & Karp, 2002; Hoffman & Robins, 2005; Hoffman & Vargas, 2005; Karp, et al., 2007), little has been written on the actual support mechanisms used in high school to help underachieving students succeed with college coursework. Jobs for the Future, which has written extensively on early college high schools, offer the following suggestions to help students:

- Align the high school and college standards and curricula (Hoffman & Robins, 2005, p. 5)
- Use liaison staff to link the high school and college campus and sustain the partnership.
- Team-teach courses with high school and college instructors (Hoffman & Robins, 2005, p. 7)
- Offer college prep seminars that focus on Conley's four kinds of college readiness skills (2008).
- Incorporate a "learning community" model, in which students take college courses as a cohort and receive social/emotional support from one another (Hoffman & Robins, 2005, p. 5)
- Offer guided use of college services, including the library and tutoring centers.

These strategies are designed to smooth the transition from the high school to college and to offer the academic and social supports that young students need to succeed. This is a very short list; what else is needed?

Terry Born works with a national consortium of 13 early college high schools. Many of these urban schools accept struggling students who lack college readiness skills. He describes the

"academic, administrative, and emotional supports" required for student success at two such schools (Born, 2006, p. 50). Unfortunately, this triune description is not a framework; in fact, this writer was unable to discover any scholarly framework for high school student support in college coursework.

Born outlines some of the main differences between the support-rich high school environment and the relatively support-barren college environment. Not too surprisingly, he reminds the reader, "Besides managing their behavior, writing is the single most important and most underdeveloped skill among students entering early college" (Born, 2006, p. 51). One student interviewee pointed out another contrast:

We're used to going to the teacher and the teacher tells you how you are doing. In college what they say is, "You go to this room at this time and you get help if you want it." They won't tell you you're failing. You could be sitting in the class the whole time, and they won't tell you [that] you are failing. The way you find out is when you get your report card. (Born, 2006, p. 51).

Born offers suggestions, which could prove useful as the Amesbury EC program moves forward. He discusses how one school offers "contract classes" where the high school students are the only enrollees; in this way support can be personalized and maximized (Born, 2006, p. 54). Later, students enroll in real campus classes where they mingle with adults and the familiar face of their high school teacher is gone. Other suggestions include a seminar to make explicit the college readiness skills required in college, plus a "distributive counseling model" that pulls many adults into caring relationships with the students (Born, 2006, p. 53). Born's description of support is broad-brushed; he discusses large-scale institutional supports, but provides little detail about day-to-day strategies that promote student success.

Theory of Change

The monthly meetings of the planning team, for over a year, led to the gradual consolidation of a system of beliefs about teenagers and community and educational entrepreneurship that distinguished the EC program. This theory of change can be summarized by the following five points:

- Students want to practice grown-up behaviors: Identity-formation is central to adolescent development, must include opportunities to assume adult-like roles and responsibilities, and requires years to evolve (Erikson, 1968).
- If adults believe in students, they will believe in themselves: At risk behaviors are diminished and student resilience enhanced by the triad of caring and supportive adults (and peers), high expectations, and multiple opportunities to participate in a meaningful way (Benard, 1991).

- Students must do the work; caring adults cannot do it for them: Students with strong self-efficacy beliefs are more likely to assume difficult challenges, put forth more effort, and persevere through obstacles and challenges (Bandura, 1977, 1997; Zimmerman, 1995).
- Everyone has a stake in this work: Positive child development is the product not only of internal forces, but also the external environment, including the home, school and community (Bronfenbrenner, 1979).
- New innovations do not start themselves; "don't take no for an answer:" Effective educational reform is more likely to develop locally in response to external standards and goals, than through generalized top-down mandates developed distantly.

RESEARCH QUESTION

Having established the identity of the students, the rigor of the college courses and the encouraging preliminary academic outcomes (Leonard, 2010), this paper seeks to ask the "How" question. How are they surviving?

What supports from administration, faculty, parents and students are required to help academically average students in the 10th grade reach a 100 percent success rate on college-level dual enrollment coursework as part of a college-readiness initiative?

For the purposes of this paper, the concept of support is defined in a way that displays a timeline of support and emphasizes the importance of many players. "Administrative support" refers to the structures that were put in place by the planning team that would maximize student success, such as the size of the classroom, the daily student schedule, and the availability of materials. Most of these were agreed upon before the first day of class. A program of this ambition will not succeed without full administrative support from both institutions. There was also "faculty support," which reflected the combined efforts of guidance counselors and teachers to help students succeed, such as counseling sessions or after-school tutoring. (One guidance counselor served on the planning team, so her contributions showed up under administrative and faculty supports). There was "parental support," which focused on support from the home and then there were "student strategies," which were used by the students themselves. This conceptual framework emphasizes the roles played by many people in supporting EC students.

The planning team had a "cradle-to-grave" concept of support, which begins when freshmen students are first recruited for the EC program and will hopefully last

until the students are well into college. As a result, the evidence for support, which is presented below, includes those things that were used to assist 9th graders and parents to first join the program.

Not only did the team want 100 percent student success, but they wanted a true early college experience. After all, the ultimate measurement for student success is college readiness, not just a good grade at the end of the semester. For this reason, the team always had one eye on the long-term goal of college readiness and one eye on the student. The results below demonstrate how the team tried to design a truly authentic college experience for the students.

The planning team slowly came to realize that the provision of "support" would be important not just for students, but also for parents, teachers and even guidance staff. As a result, this paper addresses all forms of support. While the overall goal is 100 percent student success, support for all parties involved would prove to be essential.

METHODOLOGY

This is a qualitative case study of one high school enhanced dual enrollment program. For the purposes of the planning team, this is one aspect of a comprehensive program evaluation. This was a "first-pass" evaluation of the supports in the EC program, which sought to discover and document the resources and strategies used for student success, while making no attempt to measure the relative effectiveness of each strategy.

There were four sources of data used for this investigation. First, the principal investigator was a participant-observer on the planning team for 15 months. In this role, he recorded the minutes of the monthly meetings on a digital recorder. Transcriptions of the recordings were then provided to team members to remind them of decisions and timelines and to inform the agenda for future meetings. The transcriptions document the team's concern for a high success rate and for ample student support.

Students were surveyed with a two-page questionnaire, which combined short answer questions with a Likert Scale. The Likert Scale is a useful device when working with teenagers, as it presents provocative statements designed to elicit reactions from students who might otherwise be unsure of their feelings and short on words (see Appendix for the full survey). The questions clustered around four topics: factors affecting student *enrollment* in the EC program, their *feelings* about being in the EC program, their assessment of the *academic* rigor, and their *aspirations* for the future. The team decided to ask students to identify themselves on the survey, a decision which threatened the honesty of the answers, but allowed the researcher to zero in on struggling students. The questions were analyzed statistically for mean response and variability (standard deviation) and interpreted accordingly.

Thirdly, interviews were conducted with all three teachers, the lead guidance counselor, the high school principal, the district director of curriculum and the college dean. Nearly half the students (n = 16) were interviewed in focus groups of four students each, with a sampling of both top-scoring and struggling students. Mason points out that interviews can supplement surveys by adding "depth, nuance, complexity and roundedness in data" (2002, p. 65). The interviews provided new information and allowed for triangulation with survey data. About half the parents were interviewed in a group session in December.

Interviews were digitally recorded, transcribed, and analyzed using computer-assisted qualitative data analysis software (*Weft*). The software facilitated successive passes through the transcripts (of both interviews and meeting minutes), looking for common themes to emerge under the fourfold rubric described above. Mason describes this process of analysis as "reading interviews literally, interpretively and reflexively" (Mason, 2002, p. 78); the researcher reads literally to get the facts, interpretively to find meaning, and reflexively to consider one's own role in the process.

Finally, document analysis of the course syllabus was conducted in order to better understand the content and assignments faced by the students and the overall rigor of the work.

RESULTS

This presentation of the results will follow the four-part definition of support, which was presented in the Methodology and then will follow with specific attention to teachers, parents and students.

Administrative Support

The planning team built in certain structural supports, which served to maximize student success; most were determined in meetings long before the start of school. As much as possible, the team followed the recommendations from current research on struggling community college students (Sperling, 2009). For example, the team settled on American Literature and US History as logical courses for the sophomore year, which are easier for students to tackle than Math and require less equipment than Science. Math courses tend to be more daunting; both MCAS scores and NECC *Accuplacer* scores indicated that young students were less likely to be ready for college coursework in Math. Science courses would have required a substantial laboratory investment. The team reasoned that students could tackle the college Math courses later in high school when they were more mature; they could take the Science courses right on the college campus in their senior year.

Massachusetts recently established a set of 34 general education core college credits which are automatically transferable among all the state colleges and universities for any student with a grade point average of 2.0 or better (MA Dept. of Higher Education, 2010). The English

and History courses taught in the EC program qualified for this program. Future courses for the junior year will be chosen from the same set. This is another example of how the planning team maximized support for success, both now and in the future, for EC students.

Despite their determination to target academically average students, the planning team knew that students would have to be able to read and write at grade level if they were ever going to pass the college courses. For this reason, all the EC applicants were tested in spring 2009 as described above. The dean of the college and the Amesbury director of curriculum reviewed the reading and writing scores and selected students. Most colleges have a firm benchmark on the *Accuplacer*, below which students are assigned to remedial "developmental" courses. NECC administrators invested in the EC program, however, as a strategy to reduce the need for developmental courses, so they decided that no developmental courses would be offered at Amesbury. For this reason, they waived the *Accuplacer* benchmark, even while they administered the test in compliance with state regulations. The online test was offered on the high school campus, which facilitated student participation.

The team also decided to include a standard NECC freshmen college course called College Success in the EC program, which would provide students with important college readiness skills. An interdisciplinary integrated curriculum was recommended by the team and later developed by the three faculty members. One concern was that the EC sophomores would have to take the Massachusetts high-stakes exam in English in the spring; under federal No Child Left Behind legislation, this exam is used to determine Adequately Yearly Progress and is one benchmark for student graduation. However, there is ample evidence that curriculum integration actually promotes student achievement on high-stakes tests, even with at-risk students, and also better prepares them for the thinking skills required in college (Drake & Burns, 2004). Curriculum integration means various things, from two separate classes addressing a joint project to the complete combination of two classes into one, such as Humanities instead of English and History. At Amesbury High, the team decided that all three courses would be integrated into one daily, 90-minute class with team-teaching by the three faculty members. This model of integration, team-teaching, and personalized support with a defined cohort of students is called a Learning Community and is highly recommended by the Massachusetts Community Colleges Executive Office (Sperling, 2009). The full integration of the College Success skills and knowledge into the other two courses was considered particularly important in this model.

There were other structural supports. First, the EC class was scheduled in an extra large classroom, which had sufficient space to break the 31 students into groups when necessary, since there would always be two teachers in the classroom. Secondly, the class was scheduled during the second block of the four-block day – the period from 9:30 to 11:00 a.m. Most teachers believe students do their best work at this time, which is late enough in the morning for students to be awake, but still prior to lunch. Thirdly, the EC class was scheduled for the entire year, which is highly unusual in a 4X4 block schedule. The total time allotment was exactly the same

as might be scheduled for the semester-long high school courses in American Literature and US History, but it allowed twice the time normally assigned for regular college campus courses. In other words, students would have twice the time to address the standards, the content, and the assignments for each college course.

All textbooks and materials were paid for by the Amesbury district. In fact, in some respects, the students had better materials than those afforded to campus college students. The History teacher, who also teaches this same course on the college campus, compared the two classes,

They have a different history text because we are using used AHS texts [an AP textbook]. We are also using Reading the American Past, a primary document book which I use in my college survey class. In addition, we use Social Fabric, which contains articles written by well-known historians. I would like to have used it in my NECC class, but it is too expensive for most of my students. Fortunately AHS was willing to pick up the cost for our Early College kids.

In the same way, the school amply supplied the English books required for the EC program. In this day, technology is an important part of classroom resources. The teachers used school technology to share PowerPoints and videoclips in their lessons; the students used the same for their presentations. Students at AHS have regular access to the computer labs, so they are not without technology. Three EC students regularly used a laptop in class for taking notes and completing work, but student use of technology was not a regular daily feature.

Structural supports are not accidental; they are provided by an administration that is actively involved in the planning process and prepared to make critical sacrifices when necessary to tip the balance for success. The planning team met for a year before recruitment even began for the EC program; the monthly meetings were regularly attended by the Vice President for Academic Affairs and the Dean of Humanities and Social Sciences at NECC, as well as the AHS principal and the Amesbury district director of curriculum; the superintendent often attended.

This team created a financial model that would balance rich supports for students, parents and teachers against the modest incomes of most Amesbury families (16 percent of the EC students come from low income families). This team decided to create a self-sustaining model that would be independent of variable state funding or temporary grants. The college agreed that a flat fee of \$600 per student per year would be sufficient to cover costs, if there were 45 student enrollees (which there were not in the first year). The fee was large enough to compensate adjunct faculty for all the added requirements of the job; any short-changing in this area would have seriously jeopardized the program. Costs for professional development and materials were picked up by the Amesbury district, as well as the cost of the English teacher (an AHS faculty member). The college actually took a financial loss in the first year, which is an important

indicator of the real risks associated with support. The flat fee was raised to \$1000 per student per year for the second cohort, which still generates no net income for the college. Second cohort families will still pay only \$600 while the school will pay the difference (equal to \$16,000 for a new cohort of 40 students – a reasonable price for all that comes with the EC program).

Another important partner was the Amesbury Educational Foundation Incorporated (AEFI), which offered financial support for families who might struggle to meet the \$600 tuition fee. \$3000 was pledged for the year; as of April 2010, one family had requested help and \$2400 remained in the budget.

Faculty Support

Guidance Support

Once the overall design of the EC program was determined, a large number of procedural supports were invented and implemented to support the students and their families, beginning with the recruitment phase of the program in spring 2009. Classroom visits by the guidance staff informed freshmen about the opportunity; these were followed up by individual appointments for further explanation and recruitment. On the survey question, "Who most influenced you to join the EC program," students named their guidance counselor more than any other adult (19 out of 31 students). During the spring phase, parents were supported through an evening meeting, where the program was presented and questions were answered; many parents followed up with individual phone calls and/or appointments with the guidance staff. While one guidance counselor was the initial leader in this effort (she also attended all the planning team meetings), the case load of 31 students and their families was split evenly between three guidance counselors.

Guidance support continued in the first year, as counselors met with students who were struggling, in danger of failing, or expressing second thoughts about their involvement. Many meetings involved parents too. For example, the director of guidance services shared this story:

We had a young woman...I spent a lot of time with her and her mother. I had a pretty good relationship last spring, but she was two assignments behind ... Early College is sending out progress reports, so the girl at home had a breakdown and said, "I can't do it."... Her mother said, "Yes you can do this; you know you're smart enough, but we're going to have a meeting.... So, we finally met and she just said she was overwhelmed, she got behind. The mother said, "It's not that she can't do it; she chose not to do it." So I had to rally her. So, I had cell phone numbers, so I could directly talk to the students. So, she was going to have all her work in. She was absent yesterday, so I made another phone call. She said, "All my assignments are in" and we gave her a little carrot. Lot of the kids like to be in the Guidance Center, so we have her doing community service, after school, for us. So, she's very happy to work with my secretary.

More than once, the Amesbury principal emphasized the indispensable work of the guidance department in recruiting students and families and helping to keep them in the program. After citing several memorable examples of the director's "never-take-no-for-answer" approach, he said,

This is a key component...[She] does this all the time for everybody and she and her staff....read kids so well that they can tell what needs to be done.... That's a component that I'm not sure how to teach the other high schools....These guys did a lot of work....It's not easy pushing the right buttons at the right time. We have identified 31 kids. Lots of work done in regards to reviewing the data. This is hard; it requires a lot of time. The review of the data is undervalued.

Here we see the important support role played the guidance department as well as an example of the principal offering moral support and verbal recognition of their efforts.

Classroom Support

Inside the classroom, the team of teachers worked together to provide support to the students, both through communication and the curriculum. The teachers met together almost daily, outside of class, to plan lessons, talk about the students and deliberate about the gap between high school and college expectations. The female History teacher admitted,

I have a different perspective on maturity level than someone like [the male English teacher]; he's seen 15-year-olds for a long time so maybe he's not surprised at all. Because he keeps on telling me, "This is a good amount of homework that we're getting back. This is a lot better than the other classes." Because I'm asking, "Why isn't there 100%?" So this is good.

These differences were slowly ironed out. Much like two parents, the teachers worked to present one message and one standard to the students.

When necessary, the teachers shared their concerns with the guidance counselors. They communicated closely with parents; their email addresses were posted on the first page of the class syllabus. In the beginning, they sent out progress reports by email, so parents would know just how their child was doing, what homework was missing and where there was success. In time, these emails were reduced to a notification when an assignment was missing, sent out two days after the deadline. The faculty also attended the high school parent open houses, where they had an opportunity to talk to some parents face-to-face. All the teachers made a commitment to meet with students in after-school sessions, hours after the EC class ended. As a result, the adjunct NECC faculty members spent many extra hours at the school – meeting with students, meeting with parents, and meeting with other teachers – beyond their actual teaching role. This level of engagement helped explain why the adjunct faculty position in the EC program paid four

times the regular rate. Any short-changing in the original design budget for the program would have seriously impacted this aspect of support.

Since two of the professors were adjunct NECC faculty and all the students were fully-registered NECC students with real student ID cards, they were able to use an online learning platform (*Blackboard*) to share assignments and readings. In this way, students had ready access to materials, assignments and due dates no matter where they were. Parents could also have this information through their child's password. Teachers admitted, however, that Blackboard was under-utilized.

<u>Curriculum Integration</u>

The integration of the curriculum was an important part of classroom support for students. Document analysis of the first-quarter syllabus revealed the extent of this integration. There was only one syllabus, not three. The weekly reading assignments in American Literature and US History addressed the same time period. For example, here are the learning objectives, reading assignments and writing assignments for week five of the 1st quarter:

Week Five: Slavery In The Colonial Era

In order to understand the origins and perpetuation of slavery in the colonies, the student will be able to:

- Identify the origins of slavery in the New World
- Compare indentured servitude with slavery
- Analyze the reasons why slavery flourished in the Chesapeake colonies
- Evaluate the importance of crops and the English Civil War on slavery
- Compare Bradford's Mayflower experience with Equiano's Middle Passage
- Learn to write effectively

Reading Assignments:

- English: "Interesting Narrative of the Life of Olaudah Equiano" in *Elements of Literature*
- History: *Social Fabric*: "The Creation of a Slave Society in the Chesapeake"; *American Vision*, (pp.89-90)

Assessments:

- Ouizzes
- Discussion of Bradford's and Equiano's voyage experiences
- Compare and contrast Puritans work and family life with that of slaves living in the Chesapeake; essays on Bradford and Equiano's comparisons and slavery

Journal—fourth entry

The assignments, such as the short weekly essays, long-term research papers and classroom projects, require students to utilize information from both subjects. The assessments, such as the

weekly quizzes and unit exams, reflect both topics. In all these respects, the curriculum is integrated.

The College Success course was also integrated, but in a different way. There was no textbook and few reading assignments; instead, students were expected to utilize the strategies they learned in class when studying for English and History, reading the textbooks, preparing for an exam, or writing a paper. In College Success, for example, they learned to take notes on flash cards as they read the textbooks, writing down key concepts and questions, and they learned to follow a calendar of assignments, so they were not caught at the last minute rushing to complete an assignment. Student interviews demonstrated that students are very conscious and even proud of their new study skills:

Girl1: We actually started having study nights for this class, every Monday night.

We really do!

Girl2: We make flash cards.

Girl1: We make a lot of flash cards.

Girl1: Every Monday night; we get a lot more done. It's so much more fun that

way.

On the other hand, some members of the faculty lamented that students were not quicker to apply all the College Success skills in the other two subjects. There seemed to be a difference between adult perceptions (of where they hoped the students would be) and student perceptions (of how far they had come). More student perceptions will be shared below in the discussion of student strategies for success.

Team Teaching

The learning community model encourages collaboration and team-teaching among the faculty. This section has already documented the regular, ample communication between faculty members as they discussed students and planned lessons together. How about the teaching? Team-teaching can support student success, if it is done well (Murata, 2002; Sperling, 2009). How good was the team-teaching in the EC program? Here is a topic where it is important to think not only about support for students, but support for the teachers as well.

The teachers for the EC program were selected by the planning team. The principal made the final decision on the AHS English teacher and the dean of the college recruited instructors for US History and College Success. The three teachers were given one week together in summer 2009 to get to know one another and to begin the work of aligning and planning curriculum. Teachers were paid to participate. Part of the one week program included an exercise called a "strength quest," in which they shared their strengths, needs, and preferences. This exercise was helpful in building mutual understanding and appreciation. The summer professional development was a central part of support provided for the three teachers.

Team-teaching is a term often used in middle schools, where teams of teachers work with the same cohort of students, who may number from 80 to 120 in number. Generally, the teachers work separately in their own classrooms, but may collaborate on standards, instructional goals, pedagogy, interdisciplinary projects and assessments. A related term is co-teaching, which usually refers to one regular education teacher and one special education teacher working together in the same classroom. Both practices come backed with many research studies testifying to their effectiveness for student learning. However, both terms are insufficient for the situation in the EC classroom, where the teachers occupied the same space and time slot and no one was certified in special education. In a sense, this was an enhanced team-teaching model.

Team-teaching is very difficult, so an evaluation of the implementation in the EC program might be useful. The teachers did not get to choose their partners. In some ways, team-teaching is like a marriage in terms of the requirements for communication and flexibility. The Amesbury investigation documented ample time between instructors for lesson planning. One teacher told me,

After every class we basically we sit, because he [the English teacher] has a free time, and so, "How did that go? What did you think?" We talk about students, our concerns, so sometimes we are there for 15 minutes, sometimes a half hour, sometimes we talk for 45 minutes to an hour before he has to run or I have to go.

The team-teaching was a "tag-team" affair in which teachers took shifts in the spotlight. A common pattern was that one teacher led the class, often with a PowerPoint presentation and a discussion with students; the other teacher sat respectfully and would occasionally raise a hand to interject a question, emphasize a point or remind students of connections across the curriculum. For example, here is a conversation with the College Success instructor:

Interviewer: When you are in the room with [the English teacher] and he is teaching, leading the exercises, is there a time when you might jump and teach an application skill or offer help?

CS teacher: Actually no, I don't do that because he gets in his groove and the kids really respond to him. He will actually defer to me, "Professor P what do you think of that?" And I'm like, "Yeah." In fact, I would add this. When I'm lecturing, I've always told him that if there is a nugget out there that you can tie in go right ahead and tie it in and he'll go ahead and do that which is great because it allows me to tie in other things to what he just said, so I kind of let him cruise.

Learning to team-teach was a difficult adjustment. The History teacher shared her early impressions of the power negotiations:

We go back and forth. It takes a while. It was very uncomfortable in the beginning. I liked it in the beginning; [the English teacher] didn't like it so much. And then, by week three, I'm not sure I liked it because I felt like a visitor in the classroom and then by week five, I realized it's OK that I feel like the visitor because I really am the visitor. I'm the professor who pops up every other day to teach them some history. So I'm much more comfortable and I think [the English teacher] is too; we got the swing going.

Eventually, they settled into a pattern:

We take turns; whoever wants to go first. We plan every week, the prior week, what we're going to do the next week. So we both know what we're going to do. If someone wants to finish off something they didn't finish the week before – fine, start it. If I want to do a lecture first, then I start it. We go back and forth. No one just does it for 90 minutes. And we go back and forth. It takes a while. It was very uncomfortable in the beginning.

I sit in the back; I sit on the side. If I don't understand something or I want to make a point of historical context, I'll raise my hand like the students do and he'll call on me. And he does the same. If he doesn't understand something – in the beginning, he had to keep after me a little bit about my vocabulary – to bring it down. He would say, "Now what does that word mean?"

As a result, students always had two teachers in the classroom who were well prepared, on the same page, and ready to complement one another when there was an opportunity. Both took turns teaching each day – and they built off one another's lessons. When students were broken into project groups, then both teachers were more likely to mingle among the students.

Pedagogy

Students who are 15 years old lack the maturity of regular college students and require some adjustments to learn effectively. Of course, the stretched schedule was one solution; students had twice the time to complete the college courses. However, the teachers also pointed out other differences and discussed the ways they made adjustments for youth. For examples, the teachers were aware of teenagers' rowdiness, mercurial moods and their short attention span. The College Success professor explained,

I had not planned on being a high school teacher; it's very different, though as I told [the History teacher], "I found my high school voice." You have say, "Sit down! Stop talking!"

The History teacher added,

I feel there are several unique problems with high school students: their attention span is about 10 minutes, and they can act out in class, and we still have to remind them, "Take out your notebooks."

Working with youth requires a different kind of pedagogy, which is more flexible and adaptable.

What I like to do is that I show up and I spend my whole time in the classroom. I like to observe; I see each student, the way their behavior in the class, to get a feel for where they are, are they floating off or zoning out, because it really allows me to really tailor my lessons towards them.

This instructor has taught this course for years and he has a large repertoire of teaching strategies, so he was able to tailor his daily lessons to the moods and needs of the students, as well as the content of the other faculty members. He demonstrated cultural competence with this story:

I bring a lot of pop culture into my lecture. So I tell them, off the bat, "Hey guys! I'm a zombie fan, Romero movies and stuff." What I do is, when I do my PowerPoint, I actually use pictures. I'm like, I had a picture of a zombie wearing headphones and I said, "Does that look like you in class? It certainly does." They laugh but they get the point across, so they see where I am every day.

The College Success professor was sensitive to the overall work load. He wanted his class to make things easier for the students as they tackled college work, rather than making things more difficult with added assignments. His ability to complement, rather than compete was a plus for the students:

I however have employed more of a Socratic Seminar process to the class. My thought pattern was since they are already being pushed hard by the very nature of the courses, I wanted mine to be more a dialogue with Q and A's than "busy work". I wanted to promote divergent thinking and couple it with convergent study aids.

The History teacher compared the EC class with her equivalent class on the NECC campus. In the quotation above, she pointed out the need to take time to go over new vocabulary words. Here, she shared other accommodations:

I teach both classes using Power Point presentations. They are very similar. I admit I shorten the AHS [one]....The thing I had to get used to: you can't do anything more than 15 minutes and then you've got to move on....I don't lecture; I learned for 15 minutes – that's the cut-off. I'm very proud of myself when I can

do 15 minutes. I do PowerPoint just so I can show some pictures and they can copy some of the phrases into their notebook.

When they do a little bit more complicated reading in their *Social Fabric* book, which are articles by well-known historians, I start off – I do questions so they can read along and answer the questions at the same time so it gives them some kind of format. But I also start with vocabulary words because you forget that a 15-year-old is not the same as a 20 year old....I do have to pass out worksheets for some of the readings to help them.

In all these examples, the instructors shared the accommodations they had to make in working with 15-year-old students. At the same time, however, there was no evidence that they were "dumbing down" the curriculum content for the EC program.

No Failure Rule

One of the most important procedural supports was a conviction that no one was going to drop out and no one was going to fail the EC courses. One planning team member put it this way:

We have a really, really, really high priority that nobody drops out of this class because we don't want to reinforce the idea for students that they really can't go to college. It's way better to *think* that you can't go to college than to *find out* that you can't go to college.

The planning team believed the EC program should avoid, at all costs, communicating the message to students that they are not cut out for college. Some of the students were struggling, but they seemed to appreciate the firm support. One girl reflected,

It's a lot different than the high school classes. It's almost like a transition rather than just being thrown into a college class where you're expected to do much....they expect us to do a lot as far as reading and writing and they don't allow us not to do it but they're not almost like babying us through it — as opposed to the high school classes, [which] we can just skip, but in this class, they don't allow us not to do it right.

A male classmate conferred,

It's more like college because of that. They expect you to do it; they're not going to keep telling you, "You have to do this." You just got to do it when you get home.

Recent research has given attention to the power of refusing failure (Blankstein, 2004). The Amesbury no-failure policy was exercised in two ways. The guidance counselors sometimes

faced students who wanted to quit the program (see example above). They brought in parents, cajoled, made promises, postponed decisions, deferred, and otherwise avoided withdrawal, successfully, with all the students. Here is another example that demonstrates the firmness, even when parental support is lacking:

We did have an issue with a student in the class that was doing horribly and we rallied around. We made the student come to the meeting, we had the parent there, the college professor, the English teacher and myself. And we made the student take responsibility. So we made arrangements with the college [History] professor. He's a football player and she's going to be tutoring him every Thursday 2:30 to 3:30 and then on Monday mornings the English teacher is going to tutor him. So, he was out in the hallway and one of the other [EC] students said, "You're such a wuss. I can't believe you're going to drop the course." So we put it all on him. And the kid came up and he said, "Well, I'm not dropping if it gets easier." So, it's this kind of back-and-forth that we're observing. I had the mother come it; the mother doesn't have a back-up, offered no support, so the mother, of course, at the meeting, talked about herself and said when she was in high school she didn't do work and she really can't make her kid do work. And so, the History professor jumped in and said, "Why not? Let's get it going! Let's get him responsible." So he agreed instead of dropping right out of the class.

Unlike the mother in this example, most parents rallied since refunds were not allowed. The college Vice President expressed some envy as he thought of his own campus students: "And the impossible-to-fail support system; we should inspire that for some of our students."

The no-failure policy also showed up in the classroom. During the 1st and 2nd quarters, several students did not complete all the essays and should have received a failing grade. However, rather than award an F, the teachers simply refused to post a grade, giving an Incomplete instead. Students were required to complete every writing assignment, even if late. In this way, all the students passed. Eventually, the students learned to succeed by doing their work on time, and surprisingly, their attitudes started to change. On the February Likert Scale survey, the seven students with the lowest academic average in the EC program disagreed with the statement, "I do not really want to be in the EC program" and they strongly agreed with this statement: "I plan to stay in the EC program next year."

Student Strategies

The students themselves developed their own strategies to reach success with the EC program. These included new habits, attitudes and a more mature self-advocacy. Some were gleaned from the College Success class, while others were just invented. This was solid evidence that the students were learning the college readiness skills that were the goal of the program.

A quotation in the section on Curriculum Integration (above) described how the students learned to make flash cards to write down key concepts, vocabulary words and questions as they read the textbooks. They learned to keep a calendar of their assignments and projects – and they also learned how to start assignments early and not leave them to the last night. While their habits changed and they expressed some stress about all the writing assignments, they also admitted that they rarely studied more than an hour each night for all their classes. The EC class was clearly the priority and one girl admitted, "I do a lot less homework in other classes." For these students, the adjustment from doing no homework to doing a little homework – and doing it regularly, ahead of schedule – was a big transition, of which they were proud. Here is another student who was known as the "Queen of Zeroes" in the 9th grade for her indifference toward homework:

For me, before 1st quarter, I was up until 1:00 in the morning. I had like four missed papers....I was like "Oh no!" Now, I do all of them! I don't have any missing ones now. No more staying up until 1:00 in the morning....It makes you realize how important the future....like I've had my journal entry for Wednesday done [this is Monday] for like three days now....getting it done ahead of time.

They also went to the guidance counselor for help, or to complain about an assignment or a teacher, or just to seek consolation. What is most interesting is that as the students matured, they also began to learn to self-advocate. In the 2nd quarter, they negotiated with the teachers for a better approach to the writing assignments (which were clearly the biggest source of stress for the students). Initially, the students were required to turn in one journal entry and one short essay every week; the negotiations resulted in a longer essay every two weeks instead. These were all examples of students learning to take initiative, be self-starters, and advocate for their own needs.

The students also supported one another. Some of the students mentioned getting together on Monday nights to study; they really enjoyed this. In class, they worked together on projects, which helped them build relationships. They also competed with one another in class in a friendly way.

Girl1: We do like a lot of group work too and that's always....

Girl2: And it's always like, "Oh, what did you get? No, you didn't; I have to get that too."

Boy: Feels like everybody in that class is going together too, like everybody seems to get along; there's no issues or anything.

Girl1: People get up to talk and nobody's like "what are they saying?"

Boy: Nobody's obnoxious.

Girl1: We all respect each other.... It's really personal.

In fact, the relationships in the class were extraordinary. The principal, the teachers and the students all attested that they acted more maturely in the class, in comparison to their other classes, and that there were no instances of the arguments, fights, tardiness, skipped classes and other discipline problems that are chronic with high school life.

Support for Teachers

While there have been several references to the support provided to teachers in the EC program, there is value in pulling the examples into one paragraph. Early in the planning process, the team realized that these teachers would require professional development and on-going support. First, there was a full week of paid preparation and planning time provided in summer 2009. Out of this meeting, relationships were established that allowed teachers to communicate frequently both in class and outside of class with face-to-face meetings and email communication. They learned to listen to one another and to meet halfway on some issues. This teacher recalled the summer work:

Learning styles discussed. Lots of thing about what we like and don't like. Wanted to get everything that might come up out in the open. Came to some compromises. One we have right now is that we want them [the students] to attempt every assignment. At this point there are 18 assignments – quite a bit. We held them to it, trying to compromise for the few kids that did not complete assignment.

There were unspoken supports, such as the pride of teaching college curriculum, being on the cutting edge of an educational innovation, and watching students succeed. The college faculty were also supported with a salary commensurate with the hours invested.

Support for Parents

Support for parents took the form of various meetings. There was the recruitment meeting in spring 2009. In September, there was a parent open house, where parents visited the classroom and talked to the instructors. In December, the EC parents were invited to an exclusive meeting with the superintendent, principal and key guidance members; this was an opportunity to provide frank feedback, which turned out to be overwhelmingly positive. Parents were also supported with biweekly progress reports early in the fall, followed later with email warnings when homework assignments were overdue. They had access to *Blackboard* so they could monitor their child's work.

The reduced tuition fee was, of course, a huge support to middle-class families for whom college will always be financial hurdle. The financial support from the Amesbury Educational Foundation was an added plus. The modest tuition fee, however, turned out to be an unexpectedly important part of the overall support plan. The power of these parental payments

came out during a meeting with prospective participants. One parent asked if the tuition money would be refunded in the event a child changed his/her mind and decided to drop out in the 1st quarter; the answer was "No." In other words, the investment became an incentive for perseverance. Unlike AP courses or other dual enrollment courses, withdrawal was not allowed. Another parent, who was conflicted about the relative advantages of Honors courses and the EC program, spotted the extra supports (the small student/teacher ratio, the emails over missing homework, the no-failure policy) and asked the obvious question, "Why don't you do this for all the students?" The answer, of course, was money. In effect, parents were purchasing some extra supports that came with a smaller student/teacher ratio when they enrolled in the EC program (as well as college credits). Furthermore, the parents themselves were more committed to their children's success in light of the financial burden. More than one student mentioned the parental pressure to succeed.

The first quarter, I wasn't passing; I was procrastinating on everything, so I wasn't passing anything. And then they emailed home, the first progress report got home and they go [my parents], "Excuse me; you need to do those." Then I realized that I actually needed to do my papers.

The principal shared his own frustration that too many AHS parents did not show this commitment when there is no money involved.

DISCUSSION

This conceptual framework emphasized the roles played by many people in supporting early college students. Every month, a planning team of five to eight people met to discuss the progress of these 31 students and to lay the groundwork for the coming school year. Beyond this circle, there were teachers, guidance counselors, parents, and tutors who kept this flock on track. Undoubtedly, the EC program would not enjoy the success witnessed so far without this concentrated support. The supporting team worked closely together, communicating through meetings, telephone calls and emails, in order to maximize support. Guidance counselors called parents, teachers teamed up in the classroom, the college administrators met with school administrators and guidance directors; in so many ways, they worked together to make the program a success.

Not only were a lot of people engaged, but they borrowed from the research literature and also invented a host of useful strategies that promised to provide support to young students. This paper discussed the learning community model, a College Success class, a stretched curriculum, the relaxation of college benchmarks on the *Accuplacer*, reduced tuition fees, financial supports for struggling families, the use of *Blackboard*, an interdisciplinary integrated curriculum, teamteaching, culturally competent pedagogy, cooperative learning, the use of technology, classroom accommodations and the no-failure rule, as well as supports for the teachers themselves and the

parents. Best of all, there was evidence that students were adopting their own strategies; they were "stepping up to the plate" and doing the things that would ensure their success. In this way, they were developing college readiness skills that Conley and others believe are so important for future success in post-secondary education.

The interviews testified to the delicate balance between the vulnerabilities of 15-year-old students and the requirements of college life. For example, one teacher admitted, "The AHS students will never argue with you over a grade because you are the adult." Unlike older college students, these students could be easily intimidated, causing more than one to consider dropping out. They were more easily manipulated because they were young. For that reason, extra precautions were needed to protect them. The school guarded their academic records and tried not to expose them to media coverage, even though several newspapers published articles about the program this year. The school gave many evidences of those protections. At the same time, however, because the students were not adults, there were times for strong intervention and adult guidance, as was demonstrated above.

Course Rigor

Some may question whether the EC students were getting a real college course. Terry Born, in his description of the early college high schools cited in the Literature Review above, described a college culture which was often cold and impersonal compared to the supportive culture of the EC program. When students needed help, they were sent to a help center rather that receiving immediate, personalized attention from the professor. Likewise, when students were in danger of failing, there was no warning and no remedy. Born's research specifically named the *lack* of support as a distinguishing characteristic of college courses (2006). From this respect, a paper that focuses on special supports for early college courses is, by definition, about something other than real college.

Previous research documented the rigor of the EC courses by examining the content, materials, assignments and assessments, as well as the qualifications of the professors, and concluded that these courses were actually superior to the college campus versions (Leonard, 2010). Still, some may object to the accommodations afforded these students – the extra time, the worksheets, the refusal to accept failure, the pursuit of missing papers and so on. Two arguments can be offered here. First, anyone who has worked with students in special education will not quibble with accommodations. They understand that accommodations, properly provided, are not an attempt to water down the curriculum, but to make even the most rigorous curriculum accessible to students with special needs. Experienced teachers know that all students may need accommodations at one time or another. Secondly, many college officials are self-conscious about the low completion rate of their students, especially in the community colleges, and are increasingly willing to talk about teaching strategies to help everyone succeed. This is not so much a case of "dumbing down" the coursework as using good pedagogy to help all students

succeed. The EC program accommodations would work equally well with many adult students on the college campus who are in danger of failing. One hopes that the mission of the college – and the staunch defenders of higher education – is not to prove how difficult they are to access, but how effective they are in educating.

Students are expected to be more mature, independent, self-reliant, and self-disciplined on a college campus. Most professors will not contact students who are absent and many will not remind students of missing homework. This is a culture that is still somewhat foreign to the EC students. As they move forward through the junior and senior years, the program should ease them into this culture. The college campus is ten miles away and these 15-year-olds do not drive. As they mature, their coursework will gravitate toward the campus. At this time, the planning team envisions the following steps:

- a. The junior year will integrate and team-teach American Literature II and US History II, but the students will take the courses in one semester, not two, so the time frame will be closer to the campus model. They will cover in 67 hours what most adult students would do in 45, so the time ratio will be reduced to 1.5:1, instead of this year's 2:1 ratio. In the 2nd semester, students will take two more college electives, for a total of twelve credits for the year. All courses will be taught in the high school.
- b. By the spring semester of the senior year, students will take all their courses on the college campus. In this transition, they will also learn to use the college resources, such as the library, academic help center, and student services.

In this way, the EC program will gradually approach the schedule and culture of the college campus.

Team-teaching

Murata (2002) studied pairs of teaching teams and offered insights on choice, influences on instructional practice and influences on other classroom practices, such as grading and scheduling. On the topic of choice, he wrote, "The most important quality of a sound working relationship was the sharing of essential beliefs about teachers' roles and attitudes, especially with regard to curriculum and instruction" (Murata, 2002, p. 73). One wonders if there would be an advantage in giving the EC teachers some voice in the selection of their team-mates. Finding an adjunct faculty member who is willing to work with young students for so many hours is not easy, so perhaps this is a moot question. Still, Murata emphasizes the value of compatibility, so engaging teachers in the selection process deserves consideration.

One can also ask about the benefits if both teachers shared the instructional piece, teaching as a duo, instead of as a tag-team. The difficulty of this approach is that these teachers were specialists; only one teacher really knew the History curriculum, another knew the English

and yet another the College Success skills. They were not able to teach each other's curriculum. In truth, Murata's teaching teams reported that "planning together is more essential than coteaching" (2002, p. 71). In the EC classroom, the teachers spent a lot of time creating readings, assignments and assessments that were truly integrated, rather than trying to create team-taught instruction. This seems like the right emphasis. Still, given time, the teachers might grow in their ability to teach cooperatively.

This team-teaching was doubly challenging in that the college faculty were working with high school students for the first time. Some of the quotations cited above hinted at a lack of familiarity with high school students' habits and needs. While all the teachers have grown in their understanding of the best ways to teach high school students, there is room for growth. Veteran educators today talk of scaffolding, differentiated learning, accessing prior knowledge, making connections, mastery learning objectives and many other strategies that maximize student learning (Saphier, Haley-Speca, & Gower, 2008). Teacher supervision and evaluation was not emphasized in the planning team meetings nor was on-going professional development that focused on team-teaching and working with adolescents.

In summary, there are three possible ways in which the EC classroom might get more traction with team-teaching. One way would be to maximize the compatibility among the faculty. This could be facilitated by giving the AHS teacher a voice in faculty selection and then keeping teams together for as many years as possible. The second approach would be to emphasize on-going professional development, both in the first summer and then in ensuing years. Team-teaching is a complex task; there are many books written on the topic, which could only improve their practice. The third way is to define the parameters for effective supervision and evaluation.

Technology

In today's world, most college students now carry laptops to class and use them for notetaking, access to online learning platforms, submitting homework assignments, corresponding with the professor (and who knows what else?). Only three Amesbury students used laptops regularly. College classrooms frequently come equipped with LCD projectors hanging from the ceiling and permanently installed DVD projectors. The professors admitted that *Blackboard* was under-utilized. Here is an area where the school could provide a more college-like environment in the future. Technology is expensive and the school and district made other investments for the first year. Still, the *Blackboard* learning platform could be better utilized with its capacity for an online calendar of assignments, a window for submitting assignments and receiving feedback, the student-accessible gradebook, discussion group windows, chat rooms, and facility for online resources. The use of this communication tool should be expanded in the EC program.

Parental Engagement

One unexpected discovery of the EC program was how much the \$600 annual tuition fee affected parental engagement. Having paid the fee, parents seemed more likely to push their children to succeed. In general, the school found it easier to get parents involved as an additional voice in pushing students to excel. Despite the example cited above of the one parent who was ready to let her son drop out, most parents appreciated the progress reports and emails and were quick to comply with pressure on their children.

During one evening meeting for parents and students who were interested in joining the second EC cohort, one parent listened to the glowing reports from faculty and students that highlighted the College Success course, the academic rigor, the no-failure rule, and the achievement successes. Given the obvious value of such strategies, she wanted to know why *all* the students at Amesbury were not getting these services. Part of the answer was that the successes were due, in part, to the small student/teacher ratio and the College Success course, which were purchased with tuition dollars. The parents were also paying for nine college credits. This was the answer for the general public. The other part of the answer, however, was that the school discovered that parents were more invested when they had to pay some money. The principal pointed out, privately, that too often, when non-EC parents were called about uncompleted homework, they were wont to excuse their child and criticize the school for "harassment." In short, the small tuition payment was transforming parents into better supporters for academic excellence.

Looking Forward

Could the Amesbury EC project be expanded across the state? This was an average suburban high school. The EC students were average, but not unintelligent. 89 percent of the EC students scored at the Level III (Proficient) range on the 8^{th} grade English MCAS in 2008. Statewide, 63 percent of all students scored in the Proficient range (n = 46,158), so the Amesbury EC experiment could be generalized to this larger group (MA Dept. of Elementary and Secondary Education, 2008). This program certainly has implications for other high schools across the state. NECC reported that there were three other high schools making inquiries about replicating the early college program.

The Amesbury principal imagined the day when all students would take dual enrollment courses before graduation. The Amesbury experiment did not reveal what would happen to Level II (Needs Improvement) or Level I students (Failing). This year, there were no students with special needs in the EC cohort; this could change next year, based upon early applications for the program. Expanding the EC program to all students will be a future project for the planning team.

As the EC program moves forward into year two and year three, additional research will be necessary to document how the program achieves the goal of college readiness. Longitudinal research would be useful to see how these 10th graders fare when they finally enter college. Other possible topics for investigation are a documentation of the inter-agency negotiations that were required for this kind of partnership and a closer study of the entrepreneurial leadership that made the EC program possible.

LIMITATIONS

All case studies have limited generalizability. This investigation was a case study in part because there were no similar early college programs in Massachusetts. Certainly, there are useful lessons for other suburban schools hoping to replicate the program. Hopefully, this paper will offer lessons and challenges for urban schools as well.

As a member of the planning team, the researcher was a participant-observer in this investigation with a personal investment in the overall success of the program. This increases the possibility of bias in the research. To compensate, data was collected from multiple sources, at multiple times during the school year, and then triangulated to give a more accurate picture of the support mechanisms available in the EC program. The participant-observer role allowed for the collection of more data, over a longer period of time, and a more accurate picture of the program, which will prove useful to those wanting to replicate the work.

Even with this inside perspective on the evaluation, there were time constraints on the research. As a result, there was insufficient time to really study the classroom pedagogy, for example. This paper is unable to report knowledgeably on the use (or lack of use) of many pedagogical strategies that are associated with student learning, such as scaffolding, differentiated learning and the others listed above. This might be an area for future research.

At this stage, the research investigation was a joint effort in that the methodology was reviewed and, at times, edited by the planning team. Teachers, parents and students, however, had no voice in planning the evaluation. In the future, a true participatory action research project would better reflect the needs, questions, and priorities of everyone involved.

REFERENCES

- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school through college.*Washington D. C.: US Department of Education.
- Bailey, T. R., Hughes, K. L., & Karp, M. M. (2002). What role can dual enrollment programs play in easing the transition between high school and postsecondary education? *Journal for Vocational Special Needs Education*, 24, 18-29.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review,* 84(2), 191-215.
- Bandura, A. (1997). Self-Efficacy: The exercise of control. New York: W.H. Freeman and Company.
- Benard, B. (1991). Fostering resiliency in kids: Protective factors in the family, school, and community.

 Portland OR: Western Center for Drug-Free Schools and Communities.
- Blankstein, A. M. (2004). Failure is not an option: Six principles that guide student achievement in highperforming schools. Thousand Oaks CA: Corwin Press.
- Born, T. (2006). Middle and early college high schools: Providing multilevel support and accelerated learning. *New Directions for Community Colleges* (135), 49-58.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design.*Cambridge MA: Harvard University Press.
- College Board (2008). The 4th annual AP report to the nation. New York: College Board.
- College Board (2010). The 6th annual AP report to the nation: Massachusetts: College Board.
- Collegiate High School at Northwest Florida State College (2009). Retrieved June 26, 2009, from http://www.nwfcollegiatehigh.org/
- Conley, D. T. (2005). *College knowledge: What it really takes for students to succeed and what we can do to get them ready* (1st ed.). San Francisco, CA: Jossey-Bass.
- Conley, D. T. (2008). Rethinking college readiness. *New England Journal of Higher Education*, 22(5), 24-26
- Delisio, E. R. (2009). Remembering, supporting, the "forgotten middle". *Education World*. Retrieved from http://www.education-world.com/a issues/chat/chat165.shtml
- Drake, S. M., & Burns, R. C. (2004). *Meeting standards through integrated curriculum*. Alexandria VA: Association for Supervision and Curriculum Development.
- Erikson, E. H. (1968). *Identity: youth and crisis*. Oxford England: Norton & Co.
- Fast Facts (2010). How long does it take students at colleges and universities to complete their bachelor's degrees? Retrieved March 16, 2010, from http://nces.ed.gov/fastfacts/display.asp?id=40
- Hoffman, N., & Robins, A. (2005). *Head start on college: Dual enrollment strategies in New England, 2004-2005*. Boston MA: Jobs for the Future.
- Hoffman, N., & Vargas, J. (2005). *Integrating grades 9 through 14: State policies to support and sustain early college high schools. Early college high school initiative*. Boston MA: Jobs for the Future.
- Karp, M. M., Calcagno, J. C., Hughes, K. L., Jeong, D. W., & Bailey, T. R. (2007). *The postsecondary achievement of participants in dual enrollment: "An analysis of student outcomes in two states"*: National Research Center for Career and Technical Education.
- Killough, A. C. (2009). How to help struggling students in high school? Send them to college. Boston: Jobs for the Future.
- Kirst, M. W. (2008). Secondary schools and colleges must work together. *The NEA Higher Education Journal*, 111-122.
- Leonard, J. (2010). *The Amesbury early college program: Preliminary first-year outcomes*. Paper presented at the New England Educational Research Organization.

- MA Dept. of Elementary and Secondary Education (2008). *Spring 2008 MCAS tests: Summary of state results*. Malden: MA Department of Elementary and Secondary Education.
- MA Dept. of Elementary and Secondary Education (2010a). 2008-09 Plans of high school graduates report. Retrieved March 16, 2010, from
 - http://profiles.doe.mass.edu/state_report/plansofhsgrads.aspx?mode=school&orderBy=
- MA Dept. of Elementary and Secondary Education (2010b). School district profiles Retrieved March 16, 2010, from
 - http://profiles.doe.mass.edu/profiles/student.aspx?orgcode=00070505&orgtypecode=6&leftNa vId=300&
- MA Dept. of Higher Education (2010). MassTransfer Retrieved April 4, 2010, from http://www.mass.edu/masstransfer/Students/TransferBlock.asp
- Mason, J. (2002). *Qualitative researching* (2nd ed.). Thousand Oaks CA: Sage.
- Murata, R. (2002). What does team teaching mean? A case study of interdisciplinary teaming. *Journal of Educational Research*, 96, 67-77.
- Rodriguez, N. C. (2010, February 18). Kentucky to be part of early college pilot project. *Courier-Journal*.
- Saphier, J., Haley-Speca, M. A., & Gower, R. (2008). *The skillful teacher: Building your teaching skills* (6th ed.). Acton MA: Research for Better Teaching, Inc.
- Schooldigger (2010). Massachusetts high school rankings. Retrieved February 23, 2010, from http://www.schooldigger.com/go/MA/schoolrank.aspx?level=3
- Sperling, C. (2009). *The Massachusetts community colleges developmental education best policy and practice audit: Final report*. Boston: Massachusetts Community Colleges Executive Office.
- Swanson, M. C. (2005, November 2). It's time to focus on the forgotten middle. *Education Week, 25,* 31, 33.
- Wright, D., & Bogotch, I. (2006). High school: Erasing borders. Journal of College Admission(193), 18-24.
- Zimmerman, B. J. (1995). Self-efficacy and educational development. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 202-231). New York: Cambridge University Press.

APPENDIX

Student Number				Date	e		
Circle t	he word or the wor	ds that descr	ibe your thou	ghts about each	question below.		
1.	Being enrolled in t	the Early Coll	ege Program	makes me feel (c	circle as many wo	ords as you like):
	Anxious	Worried	Superior	Confident	Scared	Нарру	
	Fearful	Special	Honored	Weird	Nervous	Proud	
	Other (wr	ite the best v	vord that desc	cribes your feelin	ng)		
	Make a double cir	cle around th	e word that a	lescribes you <u>the</u>	most.		
2.	Who were the peo	•	uenced you to	join the Early C	ollege Program?	Circle as many	
	Parent	Relativ	e Gui	dance Counselor	Tead	cher	
	Principal	Friend	Som	<i>neone Else</i> (descr	ibe here)	_	

Make a double circle around the person who influenced you $\underline{\textit{the most}}$.

Each item below is followed by 5 choices, indicating how strongly you agree or disagree with the statement. Check off the ONE box that best describes your opinion.

Questions about your enrollment in the Early College Program

		Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
3.	My parents (at least one) made me enroll in the Early College Program					
4.	I enrolled in the Early College Program because I need a challenge					
5.	I do not really want to be in the Early College Program					
6.	I enrolled in the Early College Program because I plan to go to college					
8.	I'm not sure I belong in the Early College Program					
9.	I enrolled in the Early College Program because my friends also enrolled					
10.	My parents (at least one) encouraged me to enroll in the Early College Program					
11.	I help pay for the cost of the Early College Program					

Questions about your expectations for this class

		Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
12.	Sometimes I worry that I may not	Agree		Оринон		Disagree
12.	succeed in the Early College					
	Program					
13.	I expect to score in the top half of					
	my class in the Early College					
	Program					
14.	Usually I am confident that I can					
	handle the work in the Early College					
	Program					
15.	I will probably score in the bottom					
	half of my class in the Early College					
	Program					
16.	If the work gets too tough, I plan to					
	drop out of the Early College					
	Program					

Questions about the work in Humanities (American Literature & US History) and College Success:

		Strongly	Agree	No	Disagree	Strongly
		Agree		Opinion		Disagree
17.	This work is harder than my other classes					
18.	College Success makes me a better student in this class					
19.	I have less homework in this class than in my other classes					
20.	This class requires me to do more writing than any other class					
21.	In this class, you don't get very much help; you're pretty much on your own					
22.	This class requires me to do more reading than any other class					
23.	College Success doesn't really help me with my other classes					

Questions about your future

		Strongly	Agree	No	Disagree	Strongly
		Agree		Opinion		Disagree
24.	I would like to sign up for an Advanced					
	Placement class next year					
25.	I want to take a Dual Enrollment college					
	course this summer					
26.	I plan to stay in the Early College					
	Program next year.					

27. At this t	time, what are your plan	s <u>for the year after you </u>	<u>graduate</u> from h	igh school? Circle	the best
choice.					
	2-year College	4-year College	Work	Travel	

Military Other (name here) _____ Don't Know