

# REGIONAL EDUCATIONAL LABORATORY

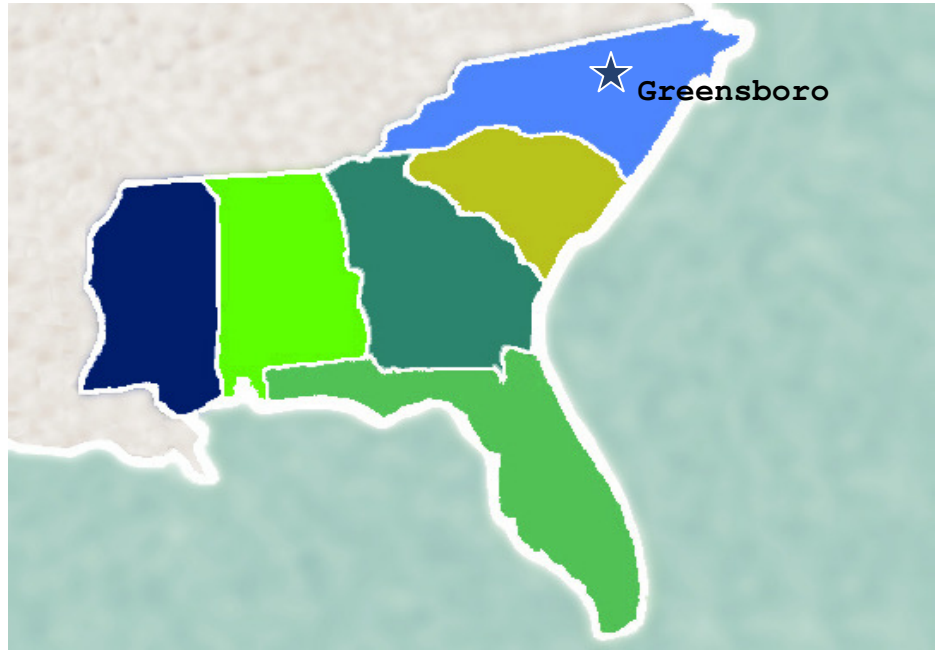
## SOUTHEAST ~ SERVECenter

November 2010, EBE # 755

### EVIDENCE BASED EDUCATION REQUEST DESK

#### OUR GOAL

To assist educators and policymakers in their efforts to apply the evidence base to decisions about policies, programs, and practices they encounter.



#### REQUEST:

I am a college speech instructor teaching a college-level speech course to high school freshman in an early college system. I was writing to see if you knew of any research conducted on students in the early college?

#### RESPONSE

##### Research Conducted on Students in Early College Programs:

"The Bill and Melinda Gates Foundation created the Early College High School Initiative in 2002, opening more than 200 hundred early college programs across the nation and every year a new report is created to evaluate the progress of the program (Berger, Adelman, & Cole, 2010). REL-SE staff identified the latest synthesis report and other studies that examined secondary school outcomes for early college students. In general, the studies concluded that dual-enrollment students: outperformed district averages on statewide math and ELA assessments; graduated from high school with approximately one year's worth of college credit; and were more likely to graduate from high school and to enroll in college than their non-dual-enrollment counterparts. The reports are summarized in the following table.

If you have any questions regarding this document, please contact the REL-SE, 1-800-755-3277 or RELSoutheast@serve.org

Report	Outcomes
<p><b>American Institutes for Research &amp; SRI International. (2009). <i>Fifth annual Early College High School Initiative evaluation synthesis report: Six years and counting: The ECHSI matures</i>. Washington, DC: American Institutes for Research.</b></p>	<p><b><u>High School Outcomes</u></b></p> <ul style="list-style-type: none"> <li>• In 2007–08, ECSs outperformed their comparison districts on state assessments in English language arts (ELA) and mathematics. ECSs scored an average of 7 percentage points higher than comparison districts in both content areas. Overall, the mean proficiency rate for ECSs was 74 percent in ELA and 67 percent in mathematics. ECSs located on a college campus had stronger performance (compared with their districts’ averages) than ECSs located off college campuses.</li> <li>• In 2007–08, students estimated that their high school grade point average (GPA) was 3.0 (B average). Analysis of transcripts at 38 schools (a nonrepresentative sample) revealed a slightly lower GPA of 2.7, which is a very similar GPA to results from a national study (2.8). Females and students from non-English-speaking homes reported higher GPAs in their high school classes than other students, while minority, first-generation college-going, and low-income students reported lower GPAs than white students.</li> <li>• Between 2006–07 and 2007–08, the average 9th to 10th grade progression rate was 85 percent, with ECSs located on a college campus having higher progression rates than ECSs not on a college campus. For the 12 schools with 4 or 5 years of data, an estimated 66 percent of the students who entered as 9th-grade students will graduate from the ECS on time. For these few ECSs, this estimate is 14 percent higher than the schools’ comparison districts’ average estimate.</li> <li>• The highest transfer rate for students out of ECSs was between 9th and 10th grades. Nine percent of 9th-grade students left their school between 2006–07 and 2007–08.</li> </ul>

- Overall, students reported fairly high levels of academic engagement, in terms of both persistence and interest, and academic self-concept in 2007–08. First-generation college-going students reported lower engagement and self-concept than other students in the initiative, although females and students from non-English-speaking homes reported more engagement.
- In 2006–07, the average daily attendance rate in ECSs was 94 percent. Attendance was higher for students attending an ECS located on a college campus.”

### **College Outcomes**

- Students estimated that their college GPA was about 3.1. ECSs reported that, on average, ECS students who graduated in 2006–07 earned 23 college credits.
- Eighty-three percent of the ECS students surveyed reported that they expected to receive a degree from a 2-year or a 4-year college; one-third responded that they expected to graduate from college and pursue further education. First-generation college-going students were less likely than other ECS students to aspire to a 4-year college degree or higher.
- Student enrollment in postsecondary education in the fall after high school graduation was higher for ECS students than for a nationally representative sample (88 percent versus 72 percent). It is interesting to note that ECS graduates were considerably more likely to enroll in a 2-year college than is the norm nationally—43 percent versus 28 percent.
- Because they can accrue a significant number of college credits while in high school, graduates of ECSs can often choose whether to enter college as transfer students or as freshmen. Results of interviews with a small sample of ECS graduates revealed that most chose to enter college as freshmen rather than as transfer students. Most of these students reported

	<p>that they felt more prepared for college than other new students. They noted that they knew what to expect in college classes and that their experience at the ECS prepared them for the writing, reading, and time-management skills that would be required to be successful in college.”</p>
<p><b>Edmunds, J., Bernstein, L., Glennie, E., Willse, J., Arshavsky, N., Unlu, F. et al. (2010). Preparing students for college: The implementation and impact of the Early College High School model. <i>Peabody Journal of Education</i>, 85(3), 348–64</b></p>	<ul style="list-style-type: none"> <li>• A larger percentage of ECHS students were progressing more rapidly through a college preparatory track of study, compared to control-group students.</li> <li>• Results showed that the ECHS were providing a more accelerated course load to a wider range of students than the traditional high school.</li> <li>• The ECHS was creating a college going culture through a variety of approaches, including setting expectations for their students to go to college, exposing their students to a college preparatory course of study, and providing college awareness activities.</li> <li>• According to the staff survey, 75 to 99% of students in the ECHS were on a college preparatory course of study. The remaining students were on a college tech-preparatory course of study. Survey responses indicated a strong expectation for going to college, with 87% of students agreeing or strongly agreeing that the staff expect all students to go to college. Seven of nine staff (77%) agreed or strongly agreed that the staff expect all students to go to college.</li> <li>• Sixty-nine percent of students either agreed or strongly agreed that they knew the courses they had to take to get ready for college. Seventy-eight percent of students agreed or strongly agreed that school was helpful in preparing them for what they wanted to do after high school.</li> </ul>
<p><b>Glennie, E., Edmunds, J., Bernstein, L., &amp; Purtell, K. (2009, April). <i>Preliminary outcomes in an early</i></b></p>	<p>“Findings from one pilot school demonstrated that the ECS students were more likely to take geometry in 9th grade than students who were not selected to attend the ECS, and this benefit of attending an ECS was particularly pronounced for</p>

<p><i>college high school: Results from a pilot study. Paper presented at the American Educational Research Association Conference, San Diego, CA. [Cited in Berger, A., Adelman, N., &amp; Cole, 2010]</i></p>	<p>low-income students” (p. 335)</p>
<p><b>Edmunds, J.A. (2010). <i>A Better 9th Grade: Early Results from an Experimental Study of the Early College High School Model. A Policy Brief.</i> Greensboro, NC: SERVE Center</b></p>	<ul style="list-style-type: none"> <li>• In the Early Colleges, 97 percent of ninth graders took Algebra I, and 80.9 percent had successfully completed it by the end of the year. Among the control group 76.3 percent took the class, and 67.3 percent successfully completed it.</li> <li>• In the Early Colleges, 79.4 percent of African-American, Hispanic, and Native American ninth graders successfully completed Algebra I, compared to 57.3 percent of minority students in the control group. The gap between minority and nonminority students in Algebra I was 2.1 percent in the Early Colleges and 13.6 percent in the control group.</li> <li>• In the Early Colleges, 2.7 percent of students were suspended at least once during ninth grade, compared to 20.6 percent in the control group.</li> <li>• The groups had similar numbers of excused absences, but Early College students averaged 3.85 unexcused absences, compared to 6.41 for students in the control group.</li> <li>• Early College students reported higher levels of engagement in school-related activities. Students in the control group reported feeling a higher level of self-efficacy in English-Language Arts.</li> <li>• Early College students were more likely to report a challenging high school experience, rigorous and relevant instruction, high expectations from their teachers, and positive relationships with their teachers. They reported receiving more academic and social-emotional support.</li> </ul>



## Annotated Bibliography

**Berger, A., Adelman, N., & Cole, S. (2010). The Early College High School Initiative: An overview of five evaluation years. *Peabody Journal of Education*, 85(3), 333–347. Retrieved from ERIC database.**

Abstract by EBSCO:

In 2002, the Bill & Melinda Gates Foundation started the Early College High School Initiative (ECHSI). Through this initiative, more than 200 Early College Schools (ECSs) opened by fall 2009. All of the schools aim to provide underserved students access to college classes while in high school. This article will provide an overview of the first 6 years of the ECHSI, and key findings across 5 years of the ECHSI evaluation, in particular highlighting how participants have implemented the ECHSI's core principles. However, the ECS is not a rigid model, and this article describes the variations in ECS implementation. Finally, this article documents outcomes such as attendance, grade-to-grade progression and graduation rates, student performance on assessments, and college credit accrual. (Contains 1 table, 1 figure, and 12 footnotes.)

**Born, T. (2006). Middle and early college high schools: Providing multilevel support and accelerated learning. *New Directions for Community Colleges*, (135), 49–58. Retrieved from ERIC database.**

Abstract by Author:

Middle and early college high schools offer traditionally underserved students the opportunity to simultaneously engage in high school and college classes, with the goal of attaining both a high school diploma and an associate degree within five years. This chapter describes how two such schools support students as they confront the complexities of their educational and personal lives.

**Brewer, D., Stern, S., & Ahn, J. (2007). An introduction to "Early College." *Education Finance and Policy*, 2(2), 175–187. Retrieved from ERIC database.**

Abstract by EBSCO:

Several national and international assessments have demonstrated that there has been little improvement in the performance of American high school students in recent decades. High school students are increasingly underprepared for transition into college-level course-work. One new approach to high school redesign, "early college," seeks to address these issues. The model features a rigorous academic course of study that engages students in college-level work in grades nine through fourteen. Early college is a subset of dual enrollment programs providing opportunities for students to complete high school and college credits with the same courses. The goal is to prepare students academically for college-level coursework while easing the transition

to higher education. Early college offers promise in directly addressing student academic performance, attrition rates, and readiness for college, but further research is needed to determine its efficacy and scalability.

**Edmunds, J.A. (2010). *A better 9th grade: Early results from an experimental study of the Early College High School model. A policy brief.* Greensboro, NC: SERVE Center**

Abstract by UNCG:

Ninth graders in North Carolina's Early College High Schools are more likely to be on track for college and much less likely to be suspended than their peers in traditional high schools, according to results from a study conducted by our university's SERVE Center.

The study also found that Early College students report higher levels of academic engagement and a more positive school experience, and that Early Colleges appear to shrink the performance gap between minority and nonminority students. Funded through a federal grant, the study used a lottery to assign students to Early Colleges or traditional high schools. The research team tracked and compared the groups using a range of measures.

"It is rare to have the opportunity to use an experimental design in real school settings," said study director Dr. Julie Edmunds, "It is even rarer to see an experimental study produce such positive results."

**Edmunds, J., Bernstein, L., Glennie, E., Willse, J., Arshavsky, N., Unlu, F. et al. (2010). *Preparing students for college: The implementation and impact of the Early College High School Model. Peabody Journal of Education, 85(3), 348–364.* Retrieved from ERIC database.**

Abstract by EBSCO:

As implemented in North Carolina, Early College High Schools are small, autonomous schools designed to increase the number of students who graduate from high school and are prepared for postsecondary education. Targeted at students who are underrepresented in college, these schools are most frequently located on college campuses and are intended to provide students with 2 years of college credit upon graduation from high school. This article reports on preliminary 9th-grade results from 285 students in 2 sites participating in a longitudinal experimental study of the impact of the model. These early results show that significantly more Early College High School students are enrolling and progressing in a college preparatory course of study. This expanded access, however, is associated with somewhat lower pass rates for some courses, suggesting the need for strong academic support to accompany increased enrollment in more rigorous courses. Implementation data collected on one school indicate that it is successfully implementing the model's components. (Contains 7 figures, 4 tables, and 3 footnotes.)



**Glennie, E., Edmunds, J., Bernstein, L., & Purtell, K. (2009, April). *Preliminary outcomes in an early college high school: Results from a pilot study*. Paper presented at the American Educational Research Association Conference, San Diego, CA. [Cited in Berger, A., Adelman, N., & Cole, 2010]**

**Oliver, M., Ricard, R., Witt, K., Alvarado, M., & Hill, P. (2010). *Creating college advising connections: Comparing motivational beliefs of Early College High School students to traditional first-year university students*. *NACADA Journal*, 30(1), 14–22. Retrieved from ERIC database.**

Abstract by EBSCO:

Early college high schools (ECHSs) are partnerships between high schools and colleges or universities designed to enhance college readiness and completion, particularly among students traditionally underrepresented in higher education. We compared the self-reported motivational profiles of ECHS students to traditional first-year university students to explore the different college advising and support services each group may require. We found differences between the two groups in academic motivation, coping skills, and receptivity to support services. ECHS students also reported significantly higher levels of educational stress. Findings are of particular importance to advisors and support personnel who plan and program appropriate support services for incoming students. Implications of these findings are discussed. (Contains 3 tables.)

**Ongaga, K. (2010). *Students' learning experiences in an Early College High School*. *Peabody Journal of Education*, 85(3), 375–388. Retrieved from ERIC database.**

Abstract by EBSCO:

Early College High Schools (ECHS) are at the forefront of high school reform embodying the principles of rigor, relationship, and relevance. This study examines students' learning experiences in the context of relationships and rigor at an ECHS. Specifically, I investigate factors that influence students to attend an ECHS, what they attribute to their academic success, and the challenges they experience. I draw upon data from individual and focus-group interviews with students at one 3-year-old ECHS in southeastern North Carolina.

**Williams, M., & Southers, T. (2010). *Blurring the lines between high school and college: Early colleges and the effect on adult learners*. *Adult Learning*, 21(1–2), 26–30. Retrieved from ERIC database.**

Abstract by ERIC:

Adult learners are an important and historically notable constituency for community colleges, and the education of adults is an important part of the community college mission. Therefore, community college leaders would want to be aware of any changes in the adult learning environment created by Early College students on their campus. As with any new program, there may be unintended consequences which result from Early College efforts. The current study investigated whether the presence of Early College students (aged 14–18) had any unplanned effects on the learning experiences of adult students at the community college. In particular, it examined the perceptions of community college chief academic officers in North Carolina regarding the effect Early College Programs have on adult students.

**Wolk, R. (2005). "It's kind of different": Student experiences in two Early College High Schools. *Jobs for the Future*, Retrieved from ERIC database.**

Abstract by ERIC:

This report focuses on the efforts of two troubled high schools (Wallis Annenberg High School in Los Angeles and Dayton [OH] Early College Academy) to launch early college programs. These two schools are a new breed of institution that combines high school and college into a coherent educational program and helps to bridge the gap between graduating from high school and entering and succeeding in college. Because it is somewhat counterintuitive to take adolescents who are already at an educational disadvantage and push them further and faster, and because the idea is largely untested, a long-term research project was launched to track the progress of early college high schools and their impact on students. Conducted by researchers at the Harvard Graduate School of Education, the study has completed its first year with encouraging findings that are summarized in this document. With only its first phase completed, the research project's findings are preliminary and much remains to be learned. Still, the findings to date are compatible with previous research on effective schools. The key findings from surveys of and interviews with members of the early college high school community focus on eight areas: (1) An educational identity; (2) Continuous support; (3) Caring relationships; (4) Support for staff; (5) Challenging environment; (6) Importance of learning spaces; (7) Constructing knowledge; and (8) Widespread and intense commitment.

### Websites of interest

**Jobs for the Future, Early College High School Initiative:** “Early College is a bold approach to high school reform, based on the principle that academic rigor, combined with the opportunity to save time and money, is a powerful motivator for students to work hard and meet serious intellectual challenges. Early college schools blend high school and college in a rigorous, yet supportive program, compressing the time it takes to complete a high school diploma and the

first two years of college. The schools are designed so that low-income youth, first-generation college goers, English language learners, students of color, and other young people underrepresented in higher education can simultaneously earn a high school diploma and one to two years of transferable college credit—tuition free. Today, the Early College High School Initiative includes 208 schools serving more than 47,000 students in 24 states.”

<http://www.jff.org/projects/current/education/early-college-high-school-initiative/57>

<http://www.earlycolleges.org/>

### **Methodology**

In order to best answer this request REL-SE staff searched multiple databases including Wilson Web (UNCG Education Database), Academic Premier, EBSCO Host, ERIC, the *American Education Research Journal*, and *Teachers College Record*. Staff also used keyword searches using Google, Google Scholar, and Bing search-engines. Some websites reviewed included: Early College high School Initiative, Jobs For the Future, and Education Commission of the States.



We provide research based information on educational initiatives happening nationally and regionally. The EBE Request Desk is currently taking requests for:

- Research on a particular topic
- Information on the evidence base for curriculum interventions or professional development programs
- Information on large, sponsored research projects
- Information on southeastern state policies and programs

For more information or to make a request, contact:

**Karla Lewis**  
**1.800.755.3277**  
**klewis@serve.org**

The Regional Educational Laboratory (REL) – Southeast’s Evidence Based Education (EBE) Request Desk is a service provided by a collaborative of the REL program, funded by the U.S. Department of Education’s Institute of Education Sciences (IES). This response was prepared under a contract with IES, Contract ED-06-CO-0028, by REL-Southeast administered by the SERVE Center at the University of North Carolina at Greensboro. The content of the response does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

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