Early College High School Initiative
2003-2005 Evaluation Report

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About the Bill & Melinda Gates Foundation's Early College High School Initiative

This report is the second annual synthesis report on the national evaluation of the Bill & Melinda Gates Foundation's Early College High School Initiative (ECHSI). The foundation established the vision for the ECHSI. At its most basic, this vision is summarized in a set of Core Principles, which includes the requirements that ECHSs provide students an opportunity to earn an Associate's degree or two years toward their baccalaureate while in high school, that the college credits are covered at public expense, and that the academic program is compressed to four or five years. The foundation continued its emphasis on school characteristics, described in 2005 as "the new 3R's"—rigorous instruction, relevant curriculum, and supportive relationships—in all ECHS classrooms.

Partners in the ECHSI include the foundation, Jobs for the Future (JFF), the intermediaries (or grantees), and local partners (who had opened 49 ECHSs nationwide by fall 2004). Although these ECHSs differ in their designs, all schools strive to integrate high school and college, giving students the opportunity to earn a high school diploma as well as two year's worth of college credit in four or five years. Another unique feature of ECHSs is their focus on serving students traditionally underrepresented in postsecondary education.

The intermediaries in the initiative are charged with enacting the ECHSI vision. The role of the intermediaries, although varied, principally involves selecting partners to develop the ECHSs, distributing grants to selected partners to open ECHSs, supporting ECHS progress (through activities such as coaching), and ensuring that the ECHSs stay within the vision of the initiative (by gauging their progress against established benchmarks). As the coordinating intermediary for the initiative, JFF assists the foundation with developing the vision. JFF responsibilities fall in three key areas: (1) accountability, (2) technical assistance, and (3) policy work.

All ECHSs developed through local partnerships that involved at least one institution of higher education (IHE), usually community colleges, working with another entity (e.g., a school district, a school, or a community-based organization). The structural designs and emphases of ECHSs vary greatly around the country. For example, pre-existing comprehensive high schools may create an ECHS program within the school to form a new small learning community, while some existing small high schools may adapt their entire program to become ECHSs, and other new schools may open as ECHSs. ECHSs work with nearby IHEs and, in some cases, are located on an IHE campus. In the 2004-05 academic year, these schools were primarily new; about half of the schools enrolled only grades 10 or lower. Some schools emphasize certain themes, for example: allied health and medicine, mathematics, science and technology, Native American culture, and teacher preparation.

Report Findings

This section provides a summary of the key findings presented in this report. The findings are based on information derived from a school-level survey, visits to and interviews with a sample of ECHSs, and interviews with the funded intermediaries.

Working with Students Underrepresented in Postsecondary Education

- ECHSs enrolled students from the groups targeted by the ECHSI (e.g., minority and low income), meeting the requirements of one of the initiative's Core Principles. However, in the second year of the evaluation, some groups remained underrepresented in ECHSs (e.g., English language learners and students with IEPs) because few ECHSs specifically targeted these groups of students.
- In response to the academic skill levels and motivation of students, some sampled ECHSs were considering raising entrance standards; employing a more comprehensive screening process; administering placement tests; or investigation greater support service delivery. Some were also considering under what circumstances students should be counseled out of the school.
- One avenue for improving students' likelihood for success in ECHSs is to reach out to the middle school grades. The vision for the ECHSI, as articulated in JFF publications, has always promoted this strategy. ECHSs are increasingly active in engaging the middle school population. Some interesting approaches taken by sampled ECHSs include: summer seminars for future applicants, preparatory programs embedded in local middle schools, and professional development for middle school instructors.

The New 3R's in High School and College Classes

- Interviewed high school instructors and students had close, personalized *relationships* that students and staff felt were central to making the ECHS a different place to learn.
- Generally, interviewed college instructors felt that they knew their ECHS students better than traditional college students; but students felt that their high school instructors knew them better than their college instructors.
- In ECHSs located on a college campus, interviewed students were more likely than their counterparts who are not on a college campus to report being treated like a college student (i.e., given opportunities to take responsibility for their own learning).
- Observations at sampled ECHSs suggested that high school instructors continued to struggle with providing *rigorous* and *relevant* instruction.[*] Although the sample of classrooms was limited, observations also suggested that mathematics instruction may be a particular challenge with regard to rigorous instructional practices.

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[*] Rigorous instruction requires students to (1) build upon existing knowledge and skills to create or explore new ideas; (2) demonstrate conceptual understanding of important content; (3) organize, interpret, evaluate, and synthesize information; (4) communicate clearly and well; and (5) revise work based on informative feedback (AIR/SRI, 2005c). Note that this definition of rigor is about instruction; it does not cover the level of rigor in the content being taught. Relevant instruction requires students to (1) address questions or problems with real-world applications; (2) make choices about what they will study and how they will study it; and (3) take on plausible writing roles and submit their work to real audiences.

- Older ECHSs had put in place more scaffolding (or activities) to support students. Staff at some of the more mature ECHSs noted that it was important to not just have the supports available, but rather to build them into daily routines and require students to participate.
- Almost all ECHSs moved quickly toward integrating the most distinctive ECHS characteristic: offering a significant number of college courses. About 90 percent of ECHS leaders reported that at least some of their students took college courses for credit in 2004-05.
- Observed college instructors largely modeled stand-and-deliver instruction rather than more varied or rigorous instructional methods for their courses with ECHS students. Also, college courses offered little evidence of relevant instruction. Instructors of courses that included both ECHS and traditional college students were more likely to report that they had not changed their expectations for the class.
- Of the interviewed students who had taken college courses, many were proud of their accomplishments and their progress in accumulating credits.

High School-IHE Partnerships

- IHEs' level of commitment varied in terms of the authority of the designated partnership liaison (ranging from faculty to college deans), the formality of the partnerships (ranging from no written agreements to explicit and long-term agreements), and the breadth of involvement (ranging from unsupportive faculty or few faculty involved to faculty across many departments being supportive and involved). Without a strong liaison, formal agreements, or a supportive faculty, ECHSs encountered many implementation challenges.
- Common planning time was frequently mentioned by interviewed high school instructors as a pivotal instructional and community-building tool.
- For most sampled ECHSs, the high school and college faculty were not strongly connected. The ECHSs presented few opportunities for these faculties to interact. None of the sampled ECHSs had formal arrangements for common planning time between high school and college faculty.

ECHS Initiative

- The foundation is encouraging intermediaries to develop more specific ECHS designs to facilitate implementation and replication. Intermediaries have clarified their expectations for ECHSs regarding design decisions such as school location, target population, and curricular focus. Yet the appropriate balance between specification and the flexibility to implement in many different contexts is still developing.
- Many of the design specifications are spelled out in local memoranda of understanding, which most sites reported having in place.
- Compared with the previous year, intermediaries spent more time developing and implementing processes for selecting sites and tracking ECHS progress. Intermediaries noted that the benchmarking document developed with JFF's oversight proved useful to both of these endeavors.
- Intermediaries have increased their capacity (e.g., hired more staff) and changed strategies (e.g., retaining higher percentages of the grants) to offer more technical assistance to ECHSs.
- Although intermediaries have improved plans for technical assistance, most have no plans or vague plans for working with ECHSs after their grants end. Since the grants at many sites are currently scheduled to expire just as or before students enter college courses, intermediaries may be lowering support levels for ECHSs just as the ECHSs reach this challenging implementation phase.

- Respondents across the initiative continued to mention several categories of policies as key to their ability to successfully implement ECHSs; dual enrollment, seat-time requirements, admissions requirements, transfer of college credits, and funding.[1]

Recommendations

One of the most pressing messages from this set of findings is that more supports are needed at ECHSs, especially if they are to engage a greater percentage of students from underrepresented groups. Supports are needed both for students and instructors. ECHSs struggling with students' skill levels, in addition to raising the entrance bar, may want to consider even greater investment in middle grade outreach activities. Schools noted that the ECHS curriculum moves so fast that there was no time to spend with students who were already far behind. By reaching out below ninth grade, ECHSs will be extending the amount of time they have to prepare students for college courses. ECHSs also struggled to implement activities that authentically supported the blended high school-college curriculum. Simply arranging for typical high school tutoring sessions did not appear to serve the needs of students with significant academic delays and with low motivation to seek extra help.

Given students' academic and social starting points, high school instructors continue to be challenged to develop rigorous and relevant courses for all students. Although most sampled ECHSs blended the high school and college curriculum on paper, there was little evidence of the blending of these two communities in practice to present a truly seamless pathway for students. ECHSs will need to provide opportunities for both levels of faculty to develop a better understanding of college and high school course expectations, and the degree to which these should influence each other.

As these recommendations suggest, many members of the ECHSI are struggling to balance some implementation tensions. These tensions include:

- The tension between the goal of working with students underserved by traditional high schools and colleges and the goal for all students to earn two years of college credit.
- The tension between developing requirements for student support activities versus allowing students to take responsibility for their learning.
- The tension between the high school culture (in which it is most often considered the teacher's responsibility to present information in a way that helps students to learn) and the college culture (in which it is normally considered the students' responsibility to learn the material).

Since these tensions are relevant across intermediaries and the ECHS models that they are refining, finding resolutions to them might best be addressed by the learning community that is the *initiative* itself. One way that the ECHSI network can help its participating members is by continuing to hold discussions about the appropriate balance for each of the tensions articulated above.

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[1] More information regarding the policies that facilitate and impede ECHS development is available on JFF's ECHSI website: http://www.earlycolleges.org/Library.html

About the Evaluation

Since 2002, the American Institutes for Research (AIR) and SRI International (SRI) have worked together to evaluate the ECHSI. This report provides findings based on qualitative and quantitative data collected in 2003-04 and 2004-05. The evaluation team gathered qualitative data (e.g., interviews, focus groups, and observations) from a sample of the ECHSs, the 13 intermediaries (and one subintermediary), and JFF. These qualitative data focused mainly on structural and design elements as well as successes and challenges experienced during implementation of the ECHS. Quantitative data were also collected through a survey sent to each ECHS, which included items on topics such as selection criteria for admission, student demographic characteristics, student college course taking opportunities, and support services.

Next Steps

As these findings indicate, the ECHSI faces complex challenges on the road ahead. One of the most persistent challenges appears to be in the work involved in crossing the divide between the secondary and postsecondary systems. This challenge is a major concern for many leaders as they develop funding models for the long-term support of ECHSs, particularly when funding college courses and their related costs (e.g., textbooks). Because the initiative is still so new—the 2004-05 academic year was only its third year—an important question remains unanswered: Do the ECHSs help students succeed? Clearly, knowing the answer to this question and others will greatly help the long-term growth and sustainability of the ECHSI. As the first cohorts of students move toward program completion, future evaluation reports will increasingly concentrate on student outcome indicators—such as course taking patterns and credits earned—that are at the heart of the ECHSI.

CHAPTER I: Introduction

The philanthropic goal of the Bill & Melinda Gates Foundation's Education Program is "…to significantly increase the number of students—particularly low-income African Americans and Hispanics—who graduate with the high-level skills they need for success in college and work" (Bill & Melinda Gates Foundation, 2005, p. 2). In pursuing this goal, the foundation has initiated work across various levels, from providing students with scholarships to providing support to states for education reform. The foundation is also providing grants to organizations and districts to reform existing high schools or to open new high schools. Two main areas of work include the High School Grants and the Early College High School Initiative. The High School Grants support "…the creation of thousands of new, high-quality schools by supporting the replication of effective school models and by supporting the redesign of [low] performing high schools into smaller, more effective schools" (Bill & Melinda Gates Foundation, n.d., p. 7).

The Early College High School Initiative (ECHSI) has the same goal as the High School Grants, but focuses specifically on providing students a rigorous curriculum by blending high school and college education. The new high schools that are part of this initiative, called Early College High Schools (ECHSs), are designed to provide students with a high school diploma while they also earn credits toward a postsecondary degree—either an Associate's degree or two years of credits toward a Bachelor's degree—at public expense. ECHSs make college credits available by partnering with local institutions of higher education (IHEs), including public and private four-year colleges and universities as well as public community colleges.

By fall 2004, 49 ECHSs had opened under the ECHSI serving over 8,000 students, and over 175 schools are scheduled to open by 2008. Many of these school were first opened as part of this initiative, and by the 2004-05 academic year, half of the open ECHSs served students in 10th grade or younger. With small student enrollments, ECHSs are designed to provide students close, personal relationships with their instructors and other faculty, resulting in better academic progress. The schools target a population that has largely been underrepresented in college preparatory work—namely low-income students, students of color, and first-generation college students. Through the ECHSI, the Bill & Melinda Gates Foundation hopes to improve the college attendance and completion rates among these groups. If ECHSs are successful, not only will these students be able to jump start their college career, they will also eliminate the costs of up to two years of college tuition.

Since 2002, the American Institutes for Research (AIR) and SRI International (SRI) have been conducting a national evaluation of the ECHSI. The ECHSI involves a new secondary-postsecondary pathway for underrepresented students. Many design elements for ECHSs are based on well established findings in the field, yet no research has measured the impact of the collection of these elements. The purpose of this evaluation is to determine the effectiveness of ECHSs in serving these students. This evaluation tracks the characteristics of ECHSs, the factors that support or inhibit their development, and the outcomes for their students.

This report describes emerging findings based on the early years of the initiative, including changes that have occurred over the course of the first three years. The previous report (AIR/SRI, 2005b), focused largely on the initiative's partner organizations and the successes and challenges they faced in opening ECHSs. This report focuses on providing more details on the characteristics of the ECHSs. Although the work of partner organizations is also included, it receives much less

attention than in the previous report. Subsequent reports will focus more heavily on student outcomes and the ECHS characteristics related to these outcomes.

The remainder of this chapter is a description of the participating organizations and the work that they do as part of the initiative. It also provides a description of the overall evaluation and the data collected for this report. Chapter II discusses the work done by the ECHSI partner organizations as part of the ECHSI. Chapter III describes the role of local partners in building effective ECHSs. Specific attention is paid to the postsecondary institutions as partners as well as the impact that material and human resources have on creating effective schools. Chapter IV steps inside the ECHSs to examine how the schools have evolved as providers of secondary education and notes their successes and challenges. Specific attention is paid to issues of recruitment, creating a culture of high expectations, and high school instruction. Chapter V examines the most unique aspect of the ECHS—the integration of college education with high school education, with an emphasis on the quality of college instruction. Chapter VI summarizes the status of the initiative and the evaluation as of the 2004-05 data collection year and looks ahead to the evaluation work that will take place during the 2005-06 data collection year.

The ECHSI Participating Organizations

The four key entities responsible for building the ECHSI are (1) the Bill & Melinda Gates Foundation; (2) Jobs for the Future, the organization that oversees the initiative; (3) the intermediaries that broker and oversee the relationships between the various local partners; and (4) the local partners involved in implementing the ECHSs. Each of these entities plays a critical role in building and sustaining the ECHSI.

The Bill & Melinda Gates Foundation

Through the ECHSI, the foundation's goal is to develop a new kind of school that will provide an educational experience that will ease the transition from high school to college by removing barriers to postsecondary education for students who are typically underrepresented in those institutions. In reaching toward this goal, ECHSs challenge the traditional separation between high school and college.

The foundation established a set of attributes, or Core Principles, required of all ECHSs (JFF, 2002). At each ECHS:

- Students earn an Associate's degree or two years of credit toward the baccalaureate while in high school;
- Mastery and competence are rewarded with enrollment in college-level courses;
- The years to a postsecondary degree are compressed;
- The middle grades are included, or there is outreach to middle-grade students, to promote academic preparation and awareness of the Early College High School option.

In addition, ECHSs are expected to reflect other key attributes of high-performing small schools. These attributes are captured by what the foundation calls "the new 3R's—rigorous instruction, a relevant curriculum, and meaningful relationships" (Bill & Melinda Gates Foundation, 2005, p. 3).

Jobs for the Future

Jobs for the Future (JFF) has the unique role as the initiative's coordinating intermediary. JFF's role is to assist the foundation with overseeing the initiative and to assist the intermediaries with understanding the vision and meeting the demands of the initiative. JFF works with the foundation on the evolving definition of an ECHS, mechanisms for tracking the initiative's progress, and performance management. JFF also supports the other intermediaries participating in the initiative by providing technical assistance to them and their ECHSs and by working to create an improved policy environment for ECHSs.

Intermediaries

The intermediaries play a key role in creating the conditions for ECHS implementation and ultimately, for the initiative's success. Their responsibilities include:

- Understanding and transmitting the foundation's vision to the ECHSs
- Developing design elements for their ECHSs based on the ECHSI core principles
- Selecting sites with the capacity to open a new ECHS
- Distributing grants to local partners to open new ECHSs
- Nurturing the local partners in their development of strong and productive relationships
- Providing technical assistance to the local partners and the ECHSs
- Providing policy support to remove barriers or add supports for ECHSs in the local and state environment
- Tracking the progress of ECHSs and holding them accountable for implementing all of the required ECHS features and for student success

In 2004-05, there were 13 intermediary organizations that received funding from the foundation to develop ECHSs. The foundation funded seven of the intermediaries at the start of the initiative (2002-03), and brought the remaining intermediaries on board over the next several years.[1] These intermediaries included higher education systems, philanthropic foundations, and education- or community-based organizations. One intermediary, Texas High School Project, does not make grants directly to local partners, but instead funds subintermediaries that in turn provide grants to local partners.[2] Exhibit 1 describes the 13 intermediaries included in this report and the number of ECHSs each intermediary plans to open.

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[1] NCNSP and THSP have a special status within the initiative; they receive some support from JFF, but not the full support as do other intermediaries. The ECHSs associated with these intermediaries are evaluated in this report as members of the ECHSI.

[2] In 2004-05, THSP worked with four subintermediaries. Only the one with open ECHSs, UT System, was part of the evaluation population. The remaining three subintermediaries (University of North Texas, Texas A & M, and Texas Association of Community College) will be added to the evaluation population in 2005-06.

Exhibit 1: 2004-05 ECHSI Intermediaries

Antioch University Seattle (Antioch): Located in downtown Seattle, Antioch is part of a six-campus national system of colleges. Antioch has considerable experience working with Native American communities, and all of its ECHSs will be opened with Native American community partners. These schools will target Native American students and will include culturally relevant instruction and curricula. OPEN ECHSs- 4; TOTAL PLANNED ECHSs- 18

The City University of New York (CUNY): CUNY is one of the nation's largest urban public university systems. CUNY has a history of collaborating with New York City's Department of Education to offer a systemwide program of college courses, college-oriented workshops, and special activities. Currently, one of CUNY's largest programs is College Now, a program that enables high school students, mostly in grades 11 and 12, to enroll in college classes. OPEN ECHSs- 1; TOTAL PLANNED ECHSs-10

The Foundation for California Community Colleges (FCCC): FCCC is a cooperative consortium of California IHEs founded in 1998. The organization supports the Board of Governors of the California Community Colleges; the Chancellor's Office; and the colleges, districts, and foundations of the CCC system. In addition to participating in the ECHSI, FCCC assists campuses in obtaining competitive rates from third parties providing technology, facilities, and database development needs. OPEN ECHSs- 3; TOTAL PLANNED ECHSs-15

Gateway to College at Portland Community College (GTC): GTC offers alternative routes for high school completion and college preparation to students who have not been successful in the traditional K–12 system. The program originated at Portland Community College, and that remains GTC's base of operations. OPEN ECHSs- 2; TOTAL PLANNED ECHSs-17

KnowledgeWorks Foundation (KWF): Based in Cincinnati, Ohio, KWF is a philanthropic organization dedicated to improving educational opportunities for all individuals. KWF pursues this goal by collaborating with public and private entities. The goal of these partnerships is to improve educational outcomes for all students. OPEN ECHSs- 3; TOTAL PLANNED ECHSs-10

Middle College National Consortium (MCNC): MCNC was formed in 1993 to support secondary and postsecondary public-sector educators in implementing educational reforms for "at-risk" learners. Schools affiliated with this network are known as Middle Colleges, and they receive ongoing technical assistance from the consortium. Middle Colleges are located on college campuses; they usually partner with a community college. OPEN ECHSs- 13; TOTAL PLANNED ECHSs-30

National Council of La Raza (NCLR): NCLR is the largest national constituency-based Hispanic organization. One of NCLR's five key strategic priorities is education. NCLR's ECHSs will be located in areas serving largely Latino communities. OPEN ECHSs- 6; TOTAL PLANNED ECHSs-12

Public School Forum of North Carolina- New Schools Project (NCNSP): NCNSP was established to attend to the college aspirations of underserved students in North Carolina. It links with the private and public sectors to advocate for high school innovation, to facilitate consensus building that ensures students graduate ready for work or college, and to invest with partnering organizations to increase the number of small high schools that deliver a relevant curriculum. OPEN ECHSs- 4*; TOTAL PLANNED ECHSs-75

* These existing schools began adapting to ECHSs in spring 2005 and opened as ECHSs in fall 2005.

Exhibit 1: 2004-05 ECHSI Intermediaries (cont.)

SECME, Inc. (SECME): SECME was created in 1975 as the Southeastern Consortium for Minorities in Engineering, and was renamed in 1997. SECME is a nonprofit corporation established through a collaborative effort. It links engineering universities, school systems, and corporate and government investors. SECME's mission is to increase the pool of underserved students prepared to enter and complete postsecondary studies in science, mathematics, engineering, and technology. OPEN ECHSs- 2; TOTAL PLANNED ECHSs-3

Texas High School Project (THSP): THSP is a public-private initiative founded in spring 2004. THSP is managed by the Communities Foundation of Texas, one of the largest charitable community foundations in the United States. THSP is a partnership among the Communities Foundation of Texas, the Texas Education Agency, and the Governor's office; it is funded by the Bill & Melinda Gates Foundation, the Michael and Susan Dell Foundation, the Communities Foundation of Texas, and other philanthropic organizations. THSP, rather than opening ECHSs, funds other intermediaries (all systems of higher education). OPEN ECHSs- 3; TOTAL PLANNED ECHSs-15

> **University of Texas System (UT System):** THSP has partnered with UT System, a subintermediary. UT System works with IHEs in its system to create and open ECHSs across Texas. The Institute for Public School Initiatives manages the ECHSI for UT System. The institute's goal is to increase the number of high school graduates who have the academic skills they need in college and to engage in partnerships to improve student performance. OPEN ECHSs-3; TOTAL PLANNED ECHSs-5

University of Georgia System (UGS): The P-16 Office of the Board of Regents of the University System of Georgia is a partnership between the Georgia Department of Education and the University System of Georgia. With this partnership, the hope is to increase college readiness and success of high school graduates traditionally underserved in the University System of Georgia. OPEN ECHSs- 0; TOTAL PLANNED ECHSs-12

The Utah Partnership for Education and Economic Development (UP): UP was established in 1990 as an affiliate of the National Association of Partners in Education, Inc. UP aims to increase the number of students with high-tech skills ready to enter an increasing number and diversity of higher-paying jobs, to improve the quality of education in Utah through business–education partnerships focused on student achievement and teacher retraining, and to increase the research partnership efforts of business and university communities. OPEN ECHSs- 3; TOTAL PLANNED ECHSs-6

Woodrow Wilson National Fellowship Foundation (WWNFF): WWNFF, founded in 1945, is a nonprofit organization with three broad areas of interest: the liberal arts, access and opportunity in higher education, and partnerships for learning. The foundation focuses on the liberal arts in its ECHSs. The foundation also focuses on forming partnerships with 4-year IHEs, including flagship state universities and top private institutions. OPEN ECHSs- 6; TOTAL PLANNED ECHSs-14

Local ECHS Partners

Each ECHS is built by at least two local partners. All ECHSs must include an IHE partner. Other partners include existing high schools, districts, and community-based organizations. Many of the challenges associated with opening an ECHS come from attempting to work across the secondary and postsecondary systems. Local partners must decide, among other things, the location of the

ECHS, a course sequence that will cover high school and college courses, and a way to finance the school.

Together, these four levels of organizations strive to create a network of ECHSs that will ultimately improve the college going rates and college success for students underrepresented in postsecondary education.

The ECHSI Evaluation

The ECHSI encompasses a complex group of organizations interacting to develop new ECHSs. The AIR/SRI evaluation, started in 2002, has completed one planning year and two data collection years. During these years, data were collected to provide information regarding the three broad research questions that guide the evaluation.

1. What are the demographic, structural, organizational, and instructional characteristics of ECHSs?
2. What factors support or inhibit the planning and development of ECHSs?
3. What are the intermediate and long-term outcomes for students attending ECHSs, especially for students traditionally underserved by the postsecondary system?

To answer these questions, the evaluation must examine the relationships between actors and factors that theoretically are expected to contribute to outcomes for students. To guide its work, the evaluation team developed a conceptual framework (Exhibit 2). The conceptual framework includes the partners described in Exhibit 1 and the relationships among organizations associated with the planning and implementation of an ECHS. JFF supports the intermediaries, the intermediaries foster the local ECHS partnerships, and both the intermediaries and local partnerships (e.g., between an IHE and a district) support the ECHSs. At the center of the conceptual framework are the ECHSs. The factors listed within each ECHS box represent dimensions on which ECHSs might vary (e.g., structure and human and material capital) and the dimensions that all ECHSs should possess (e.g., middle school outreach). Since all ECHSs will blend high school and college courses, the center of the conceptual framework shows both levels of courses (classroom environment) and the possible mutual influence of each level on the other. The right side of the conceptual framework represents the inputs and outcomes for the ECHSs. The top of the figure shows contextual and environmental factors that may facilitate or inhibit the development of ECHSs.

The conceptual framework guiding the evaluation is complex and comprehensive. This report provides descriptive information on the relationships and characteristics of the ECHSI intermediaries and the ECHSs. Intermediate and summative outcome measures are touched on in this report, but will be more thoroughly addressed in future reports as the initiative progresses.

Exhibit 2. Conceptual Framework for the Early College High School Initiative Evaluation

National	State	Local (Including Districts, IHEs, Community) Context		Individual and Aggregate Student Characteristics

Early College High School

JFF
- Policy Work
- Intermediary Assistance

ECHS Structure
- School Size
- Site Arrangement
- Program Arrangement

ECHS Human and Material Capital
- Financing
- Staff
- Facilities
- Materials
- Community/Parent Involvement

ECHS Organization
- Co-governance Decision-making
- Academic Organization
- Professional Community
- Assessment/ Accountability
- Academic/Social Support

ECHS Normative Climate
- Relational Trust & Mutual Respect
- Personalized/ Supportive Environment
- Safe & Orderly Environment
- High Expectations

Student Recruitment
- Middle School Outreach
- Students Under-represented in Postsecondary Population

Intermediary-Level Intervention
- Vision of Reform
- Intervention Strategy
- Capacity
- Implementation Activities

ECHS Intermediate Student Outcomes
- School Behavior
- Academic Involvement
- Postsecondary Preparation

ECHS Partnerships could include:
- District
- High School
- IHE
- Noneducational Organization
- Intervention Strategy

Classroom Environments

HS Instructional Attributes
- Active Inquiry
- In-Depth Instruction
- Performance Assessment
- Academic Rigor

College Instructional Attributes
- Active Inquiry
- In-Depth Instruction
- Performance Assessment
- Academic Rigor

ECHS Student Outcomes
- HS Diploma
- A.A. (or 2 Years College Credit)
- College Acceptance

Post-ECHS Student Outcomes
- Postsecondary Attendance
- Postsecondary Achievement
- Workforce
- Citizenship

NOTE: This diagram does not fully capture the complexity of the reform process. Actual situations will not be as linear or compartmentalized. The framework will be refined as the evaluation proceeds.

This report includes analyses on evaluation data collected during the 2004-05 academic year. The evaluation team gathered qualitative data (e.g., interviews, focus groups, and observations) from 25 ECHSs, each of the 13 intermediaries (and one subintermediary), and JFF. The 25 sampled ECHSs were primarily start-up schools that opened in fall 2004. These 25 schools were selected because (a) they were affiliated with one of the 8 newer intermediaries; (b) they had been sampled during the previous data collection year; or (c) they had unique features (e.g., a middle school adding an ECHS). These qualitative data focused mainly on structural and design elements as well as successes and challenges experienced during implementation of the ECHS. Once these data were collected, the team coded the data for central themes and the relationships between these themes using qualitative software (Atlas.ti) and then examined variability over time and among ECHSs.

Quantitative data were also collected through a survey sent to each ECHS, which included items on topics such as selection criteria for admission, student demographic characteristics, student college course taking opportunities, and support services. Forty-five ECHSs returned the survey (92 percent response rate).[4] However, many surveys included missing data. Therefore, the survey results, when reported, will include the total number of ECHSs that provided data.

The data presented in the following chapters is based on a combination of the qualitative and quantitative data collected and findings from previous years. The next chapter focuses on findings concerning the foundation and its direct grantees—JFF and the intermediaries.

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[4] Forty-nine ECHSs received surveys, including three NCNSP ECHSs and three UT System ECHSs.

CHAPTER II: Building an Initiative

This chapter focuses on the organizations that are coming together to build the ECHSI: (1) the foundation; (2) Jobs for the Future; and (3) the intermediaries. In working together on the ECHSI, these organizations encounter many challenges and many opportunities to support each other. This chapter describes the work of these organizations and changes they have made since the start of the initiative.

The Bill & Melinda Gates Foundation

The foundation's primary goal with the implementation of the ECHSI is to find organizations that, with the foundation's support, can open effective ECHSs that will improve student outcomes. To charge organizations with opening effective ECHSs, the foundation must first define its vision for this new type of school. At the start of the ECHSI, the foundation developed a set of initial Core Principles. Jobs for the Future (JFF), an organization the foundation selected to assist with the initiative, helped the foundation in developing and spreading this vision. Data over time indicate that intermediaries, school leaders, and school staff understand the Core Principles as the initiative's bedrock.

As various high school reform initiatives progressed, it became clear that school developers were able to achieve the school replication process more quickly when provided with more specified designs and stronger oversight (The BridgeSpan Group, 2005). As a result, the foundation further clarified its vision and shared that ECHSs should demonstrate "the new 3R's: rigorous instruction, a relevant curriculum, and meaningful relationships." The foundation has also encouraged more specificity within the ECHSI. For example, JFF collaborated with the intermediaries to develop a benchmark document for partners to use in planning and opening an ECHS. In addition, the intermediaries reported that the foundation has become more prescriptive in the kind of students ECHSs should recruit and on the need for Memoranda of Understanding (MOUs) between high school and college partners.

Jobs for the Future

From the outset, JFF has acted as the initiative's coordinating intermediary. In 2004-05, JFF continued to play a significant role in coordination of the overall initiative by supporting the other intermediaries participating in the initiative. JFF's role as initiative coordinator has included an accountability function, a technical assistance function, and a policy function. Although JFF served all these functions, its focus on accountability increased this year.

Accountability Function

After a review of the status of the initiative in late 2003, the foundation's expectations were further clarified, and JFF emerged with a new emphasis on holding intermediaries accountable for their schools' progress. As part of this emphasis, JFF intensified the review process and met with intermediaries on a semi-annual basis in 2004-05; the two reviews allowed JFF a closer examination of unresolved issues. A representative from JFF reported that the "…increasing use of data to provide a barometer to see where things are," has made it easier to track intermediaries' progress.

In addition, JFF started to develop a new tool to aid all participating organizations in tracking the accountability of the ECHSI. The Student Information System (SIS) will provide data to ECHSI partners (schools, intermediaries, and funders) that support school development and improvement. The SIS will also be a source of data for the evaluation to track the progress of students toward meeting the goals of the initiative. Although in its infancy, there has been significant progress on the SIS: a vendor (PCG/EDsmart) was selected, intermediaries pledged their schools' full participation in the data collection efforts, data access agreements were developed and signed by districts and schools as necessary, and districts started to submit data.[5] The foundation and JFF plan to use the SIS to track schools' progress and to hold intermediaries accountable for that progress. Intermediaries have been encouraged to use the SIS to track their ECHSs progress as well, both for accountability purposes and for needs assessments. JFF believes that the development of the SIS has pushed intermediaries to think about how to collect information from their affiliated schools and how to use the resulting data.

JFF's Student Information System (SIS): The Details

The SIS is an online system that contains data submitted by districts, schools, and intermediaries.

Eventually the SIS will contain data on student demographics, assessment scores, course-taking, and grades as well as data on the school (such as teacher characteristics). Data from higher education institutions will include courses taken and passed, GPA, dates of attendance, college credits, and degrees earned. The usefulness of the database will depend on the quality of the data submitted.

Technical Assistance Function

In 2004-05, JFF changed its technical assistance role to target intermediaries' unique needs and to build on its strength as a coach. JFF's more targeted assistance was aimed at increasing the capacity of the intermediaries to support schools and sustain the initiative at the intermediary and school level.

Overall, intermediaries responded positively to the support provided by JFF. There were many intermediaries who commented on JFF's availability. One intermediary found JFF to be "incredibly responsive" and a representative from a different intermediary noted, "I've really needed them and I can't speak enough about them—the quality and the immediate attention." The older intermediaries commented that they and JFF have grown together and that continued support from JFF was important. One intermediary representative stated, "JFF is the anchor to our efforts."

JFF also provided more school-level technical assistance, mainly through a literacy initiative funded by the W. K. Kellogg Foundation and a summer institute held in conjunction with University Park Campus School at Clark University. Nine ECHSs participated in the literacy initiative, which focused on developing literacy across the curriculum. As part of this initiative, schools completed a literacy needs assessment, and JFF staff used that assessment to identify

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[5]   At the end of the 2004-05 academic year, about two-thirds of the needed agreements had been arranged.

areas for improvement. In 2004-05, JFF staff visited the schools at least three times to monitor implementation and to identify what aspects of the initiative were being implemented well. Although literacy was a focus of the technical assistance, the JFF team used it as an opportunity also to model staff collaboration. Interviewed principals found the planning extremely useful, and instructors said that the training provided some new strategies and reinforced existing ones.

JFF also arranged for members of the ECHSI to participate in a summer institute offered by University Park Campus School.[6] The summer institute focused on instruction and leadership. In July 2004, 75 people from 5 different intermediaries attended; in 2005, approximately 90 people attended. A teacher commented:

> *It was also really good to see what we could become by visiting University Park. Here was this school that was established; they had great teachers. It is a great school, with successful kids. We talked to the kids. To see teachers really enjoying being there, doing awesome things—we saw them teach classes. We talked to the principal and others. It was great to see this vision on paper put into action.*

Given the success of these two technical assistance opportunities, the JFF team is considering linking the summer institute with the ongoing literacy initiative.

Policy Function

When the ECHSI began, JFF did most of its policy work at many different levels and on many different topics, such as convening a national policy conference, visiting state capitols, and helping with local policy work. In 2004-05, JFF focused on working with intermediaries to locate areas where the existing conditions are favorable for ECHSs. JFF provided customized assistance to states with favorable policies or where there were a large number of ECHSs. For example, in California—where six intermediaries have ECHSs—JFF networked these intermediaries and mobilized them to coordinate their own policy work.

> JFF identified states with policies conducive to the ECHSI and provided targeted assistance in those states.

A JFF interviewee commented that nationally and federally, JFF is "hoping to create an appetite for the policies that would help ECHSs." JFF is working toward this goal by educating policymakers "about the conditions that would be favorable to ECHSs and marrying secondary and postsecondary education." JFF is also working with the National Governors Association on its High School Honor States Program (a $23.6 million, governor-led initiative to improve high school and college-ready graduation rates in 26 states). JFF has also partnered with the National Governors Association Center for Best Practices, Achieve, and the National Conference of State Legislatures on another initiative called, Redesigning High Schools: The Unfinished Agenda in State Education Reform. This initiative focuses on identifying issues states need to address if they are to promote changes in high schools

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[6] University Park Campus School is a grade 7-12 secondary school in Worcester, MA that serves primarily low income and minority students (many of them English language learners) from its local neighborhood. It was formed through a partnership between the Worcester Public Schools and Clark University and first opened its doors in 1997-98. The school is consistently among the highest scoring high schools on the high stakes state tests at the 10th grade level.

and the community at large to ensure that all youth have a high level of academic success (JFF, n.d.).

JFF also conducted "common work" (i.e., planning work that could be of assistance to all intermediaries) on making ECHSs sustainable and developing policy engagement plans. JFF worked with intermediaries to identify "what constituents, lawmakers, legislators, and interest groups [need to be engaged] in the next two to three years to make ECHS a permanent feature." For example, Middle College National Consortium (MCNC) reported working with JFF to identify policies that MCNC principals could change and ways to garner broad political support before making those changes.

Intermediaries

In 2004-05, intermediaries' work encompassed a range of activities, most of which were similar to last year's activities (AIR/SRI, 2005b). In 2004-05 however, the intermediaries began to change their approaches to the way they selected, supported, and evaluated their schools. Intermediaries became more deliberate and specific in their site selection and oversight, a change that was consistent with the foundation's notions of increased management responsibility and design specificity.

Vision for the ECHSI

One of the continuing roles of the intermediaries is to transmit the foundation's vision for the initiative. Of course, to transmit the vision, they need to understand the vision. As they did in 2003-04, all of the intermediaries expressed visions for their initiatives that were highly consistent with the foundation's Core Principles.

> Overall, the intermediaries' vision was aligned with the foundation's vision of the initiative. However, due to the lack of preparation of many incoming students, the intermediaries expressed concerns about the ability of some students to earn two years' worth of college credits by graduation.

Intermediaries were especially vigilant in making sure that their ECHSs served the target population and encouraged collaboration between high schools and IHEs. This year, more intermediaries mentioned collaboration as a defining feature of their vision than in 2003-04. One intermediary representative said, "At the end of the day, what do we want to die for? Two things: The first is [college and high school] faculty talking meaningfully; and second, both faculty thinking hard about curriculum and courses." This increased focus on collaboration, especially among older intermediaries, is not surprising given that their schools are maturing and, thus, more likely to have students enrolled in college courses.

One aspect of the foundation's vision for the ECHSI roused concern among the intermediaries. Some intermediaries question the feasibility of all students earning two years of college credits within five years. Although most shared the view that all students could earn some college credits, and that some students would earn two years' worth, they questioned whether the students who enter the school not as prepared as their peers would struggle with this requirement. Of particular concern was how prepared the target population was for the rigor of the ECHS curriculum. In this regard, one intermediary observed, "[There is] always this tension around who

can do the work and getting the right students… [There is an] underlying tension that will permeate this [initiative] that won't change."

Middle school outreach was another aspect of the foundation's vision that intermediaries embraced to various degrees. With the exception of CUNY, whose one open ECHS includes middle school grades, intermediaries considered middle school outreach important, but not necessarily a non-negotiable design element. Especially early on in the ECHSI, older intermediaries might have put middle school outreach on the back burner to focus on establishing local partnerships and opening schools. Since 2003-04, as more schools have matured, intermediaries have helped their schools to increase middle school outreach activities. This feature of ECHSs will likely receive more attention in the coming years as outreach activities have the potential to facilitate working with a challenging population of students so they can succeed in ECHSs.

As noted previously, the foundation's specification leaves out many implementation details. There are four areas where intermediaries have added a variety of specifications: the implementation strategy, the physical location, the target population, and the curricular focus.

Although many intermediaries chose to start building ECHSs from scratch, several intermediaries worked with existing high schools to implement the reform. Over half of the ECHSs started as brand new high schools (Exhibit 3). Seven intermediaries worked with new, startup ECHSs. About one-third of open ECHSs were high schools that existed prior to the ECHSI and have adapted or will adapt to add the ECHSI elements. Five intermediaries worked with adaptation sites. In some existing high school sites, the ECHS was added as a program or a small learning community. Only 14 percent of ECHSs were programs within larger high schools.[7] Three intermediaries worked with program ECHSs. Although most intermediaries used one approach to implementing ECHSs, four intermediaries allowed sites to choose one of multiple strategies.

Exhibit 3: Percentage Distribution of ECHS Implementation Strategies, 2004-05
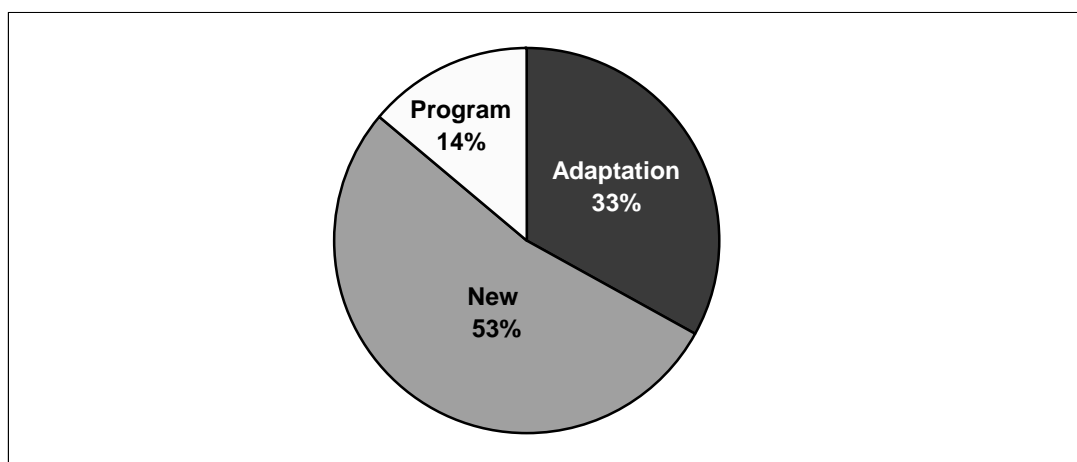
n=49

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[7] Some ECHSs are programs within larger high schools, rather than being distinct, autonomous high schools.

Although all ECHSs must have an IHE partner, the Core Principles do not require the schools to be located in a particular physical location. Some intermediaries, such as MCNC, Public Schools Forum of North Carolina- New Schools Project (NCNSP), and Gateway to College (GTC) required their ECHSs to be located on college campuses. Other intermediaries had some ECHSs sharing facilities with other schools or located in their own building (without sharing facilities with other schools). As Exhibit 4 shows, in 2004-05 a larger percentage of ECHSs (55 percent) were located on college campuses than in 2003-04 (43 percent). In 2003-04, all but one ECHS located on a college campus was affiliated with MCNC.[8] By 2004-05, nine intermediaries had at least one site located on a college campus.

Exhibit 4: Location of ECHSs in 2003-04 and 2004-05

n=21   n=49
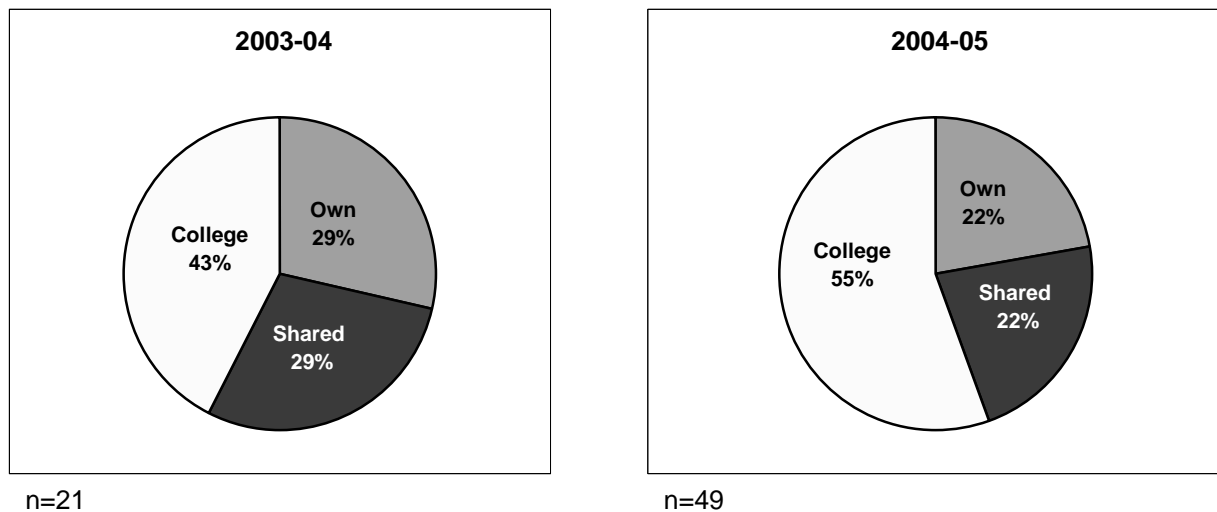
Intermediaries also varied in their definition of the target population. Although all intermediaries focus on underrepresented students, the specific target population is usually defined by the intermediary's mission or geographic region. For example, the National Council of La Raza (NCLR) targets Latino students; Antioch serves Native Americans; and Gateway to College (GTC) defines its target population as students at risk of dropping out of high school or students who have already dropped out of high school.

The final primary area of variation among the ECHSs was the curriculum focus. Other than specifying the need for a rigorous curriculum, the ECHSI does not define a curricular focus. Some intermediaries, however, have chosen a curricular theme. For example, both SECME, Inc. (SECME) and the Utah Partnership for Education and Economic Development (UP) went beyond the Core Principles by requiring their ECHSs to specialize in science, technology, engineering, and/or mathematics.

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[8] GTC and NCNSP did not have sites open as part of the ECHSI in 2003-04.

Laying the Foundation for ECHSs

With the vision for the initiative established, the next step for intermediaries was to create the conditions for ECHSs to thrive. To create the conditions, intermediaries performed the following activities:

- selected appropriate partnership sites for ECHSs;
- distributed grants to the selected sites;
- opened schools on a timeline according to their agreements with the foundation; and
- supported the ongoing development of the funded ECHS partnerships.

Selecting partnership sites

> Intermediaries' approaches to selecting partners have become more strategic and targeted as the initiative has progressed.

The approaches intermediaries used to select potential ECHS sites ranged from broadly disseminated Requests for Proposals (RFPs) to highly targeted site selection. Three new intermediaries—the Public School Forum of North Carolina-New Schools Project (NCNSP), Texas High School Project (THSP), and University System of Georgia (UGS)—took a blanket approach by sending RFPs to most K-12 systems and IHEs in their state. Generally speaking, taking a broad invitational approach to site selection allowed intermediaries to be inclusive and "not overlook anyone who needed to know" about the initiative, according to one intermediary.

Further down the continuum toward targeted site selection, City University of New York (CUNY), the Foundation for California Community Colleges (FCCC), National Council of La Raza (NCLR), SECME, UP, and the Woodrow Wilson National Fellowship Foundation (WWNFF) asked their affiliate IHEs or community-based organizations to identify potential partners that were then invited to apply to open an ECHS. MCNC sent out an RFP, but was highly selective and required potential grantees to provide plans for school design and sustainability. Gateway to College (GTC) engaged in a year-long discovery process to identify sites that were a good fit for the model.

On the basis of lessons learned, a few intermediaries have since moved toward a more strategic approach to selecting sites. Antioch's focus is on selecting sites with greater capacity for recruiting Native American students and for working with these students (see text box). For its second cohort of schools, KWF sent RFPs only to urban districts in Ohio and targeted Historically Black Colleges and Universities as IHE partners. Similarly, an FCCC representative expressed the view, "instead of just waiting for people to come to us, I'm going to do more outreach to get other partners involved."

Antioch: A Strategic Search

When Antioch University Seattle (Antioch) expanded from a state-level to a national-level intermediary, it also refined its approach to selecting ECHS sites. As a statewide intermediary, Antioch initially sent 200 RFPs across the state of Washington. However, the intermediary said that with only 28 high schools serving 50 or more Native American students, "the capacity isn't necessarily here in Washington." With the national expansion, the intermediary began "tapping schools and [national] Indian education networks that can lead [it] to sites that have greater capacity." The intermediary then sent RFPs to those sites that were identified as having sufficient potential to succeed as an ECHS.

In making final decisions about bringing a site into the ECHSI, several intermediaries started using the benchmarks developed by JFF to evaluate the viability of potential ECHS sites. Some of the criteria included: adequate space and funding to support the ECHS; schools or IHEs with growing enrollment or the potential to grow; a history of positive collaboration between the IHE and K-12 systems; the potential for shared leadership between the IHE and high school; and commitment from high levels of the IHE.

<u>Distributing grants and opening schools</u>

A key role for the intermediaries is to distribute the foundation's funds to its local ECHS partners and open the agreed-on number of schools within an established timeframe. In 2004-05, most intermediaries were progressing as planned toward their goals for opening schools. Several intermediaries, including the three new intermediaries, had increased or planned to increase the number of schools dramatically (sometimes a 100 percent increase) from year to year. A representative from NCNSP believed that it was necessary to establish schools rapidly: "The [state] agencies all are ready to do something, and putting the schools on the ground quickly is taking advantage of an opportunity that exists at the state that could…go away if it was just a conversation."

Some intermediaries, however, were behind their proposed timelines. Representatives from several intermediaries explained that their general understanding of what was involved in opening a school was improving, and that their later schools had benefited from lessons learned opening the first schools. One intermediary added an additional planning year, which pushed back the opening of some of its schools. In general, however, the message developing within the ECHSI is that it is preferable to emphasize quality over speed.

As intermediaries considered their schedule for opening schools, they also had to decide how to divide the funding—and timeline—between planning and implementation. Some intermediaries built year-long planning periods into their grant structures. NCLR moved to a two-year planning period in which partnerships received funding for a year of planning and a year of pre-opening implementation work. For two new intermediaries, the planning time was compressed; one moved quickly to open its first school in fall 2005, and the other worked with three schools that had started implementation activities already.

Developing Local Partnerships

Once their schools opened, intermediaries undertook a range of activities to assist them in developing productive working relationships among the ECHS partners, including facilitating meetings between partners, hiring an IHE-high school liaison, and establishing systems of communication between the ECHS partners and the intermediary. For the most part, these activities were similar to those described in the last evaluation report (AIR/SRI, 2005b). Following is a detailed update of one type of partnership development activity—entering into Memoranda of Understanding (MOUs).

> The majority of ECHSs reported having MOUs drafted. However, not all MOUs were formalized (signed), and intermediaries and ECHSs differed at times in their understanding of whether or not MOUs were formalized.

When the evaluation team examined this issue in 2003-04, respondents from the foundation and JFF felt that all ECHSs should create MOUs because these documents define the roles and responsibilities of each partner. However, JFF estimated that, at the time, only about half of the ECHSs had an MOU.

In 2004-05, establishing MOUs remained a priority for the foundation and JFF. Although it became more common within the initiative, a document signed by all partners seemed more elusive. Of the 43 ECHSs that responded to the 2004-05 survey, 36 reported having MOUs drafted. However, of the 36 ECHSs with drafted MOUs, only 30 indicated that the MOU had been signed by all partners. At some schools for instance, MOUs were delayed for more than a year because of resistance from IHE faculty. For one school, the intermediary had made funding contingent on a signed MOU, and the delay in signing the MOU pushed back the school's opening for a year. In addition, several intermediaries reported that the New York City School District would not sign MOUs for any ECHS located in their jurisdiction. One intermediary representative reported that despite their efforts at the behest of the foundation to get the school district to sign, "The reality is that it is just not going to happen."

It is interesting to note that school and intermediary perceptions about the existence of a signed MOU or partnership agreement were not always aligned, suggesting that the number of signed agreements noted above may be inflated. Interviews with the intermediaries suggested that fully ratified MOUs were still the exception rather than the rule. Some ECHSs apparently adhered to a draft MOU or proxy, even when no signed MOU was in place. In fact, partners of several ECHSs believed that an MOU was in place when the intermediaries indicated that it was not.

There is some tension between developing concrete short-term agreements (which may leave ECHSs at risk down the road), and developing long-term agreements (which may become irrelevant as relationships develop and evolve). At one ECHS an MOU was in place but the partners considered it to be fluid so that they could make adjustments as necessary. MCNC (as described in the text box) has a particularly nuanced view of the role of MOUs. Across the ECHSI, MOUs will continue to be an important issue to consider, particularly whether and when written agreements are critical to successful ECHS formation, development, and institutionalization.

MCNC and MOUs

MCNC gave less weight to the importance of MOUs compared with other intermediaries. MCNC developed a more nuanced view of MOUs over its 25-year history of high school-college partnerships in the broader Middle College network. According to an intermediary representative, "Most of our Middle Colleges don't have formalized MOUs…. Many of these are deep-seated relationships deep inside the institution where there's nothing on paper." In established Middle Colleges (adapting to ECHSs), MCNC emphasized the relationship between leaders of the IHE and school, the location of the school on the IHE campus, and the designation of a highly placed college staff member as a liaison between the two organizations.

Nevertheless, MCNC requires applicants for Early College grants to submit signed MOUs. This intermediary pointed out that MOUs are desirable in the early stages of a partnership, particularly if the agreements are multi-year (not renewable yearly). MCNC has experience with the challenges that come from changing leadership within existing partnerships. One established Middle College (adapting to be an ECHS) was dissolved by a new IHE president who had not been involved in the creation of the school, and the partners had no agreement in place to prevent this.

Activities to Support ECHSs

As in previous years, intermediaries continued to assist their ECHSs through various forms of technical assistance, networking, and policy support. In 2004-05, however, several intermediaries refined their approaches to providing support, especially as their ECHSs matured and the schools' grants expired. These changes resulted from lessons learned in previous years, and from the intermediaries' ongoing work with JFF and a management consulting company, The Bridgespan Group.[9] Some of these changes and the intermediaries' approaches are discussed below.

<u>Technical assistance</u>

By 2004-05, all of the intermediaries were providing some type of technical assistance to their ECHSs. Similar to 2003-04, this assistance encompassed all aspects of ECHS development, including budgeting, curriculum and instruction, and supports for students. This year, intermediaries also provided strategic planning assistance to their schools, including leadership development, long-term plans for professional development, accountability and sustainability, and grant-writing assistance for post-ECHSI support.

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[9] The foundation supported intermediary development and capacity building by arranging for several intermediaries to work with The Bridgespan Group, a management consulting firm that works exclusively with non-profit organizations.

Improvements in Coaching

In 2003-04, it was becoming clear that coaches were an important mechanism for intermediaries to support their schools. At that time, however, intermediaries reported a shortage of coaches that was, in part, related to a lack of funding. Moreover, few intermediaries had developed strategic coaching plans.

In 2004-05, several intermediaries hired more coaches and were beginning to use their coaches more purposefully. NCLR, for example, used supplemental funding from the foundation to hire several new coaches. Those coaches used a newly developed on-site assessment protocol to track school progress on the NCLR benchmarks and to adapt coaching plans to meet each school's needs. Along similar lines, MCNC changed the way it used coaches to provide more targeted assistance to the schools around the design principles. Rather than having a dedicated coach for each school, the intermediary planned to match coaches' skill sets with schools' specific needs.

The intermediaries took a combination of site-specific and broad-based approaches to their technical assistance. As in 2003-04, most intermediaries used meetings, workshops, conferences, group conference calls, or listservs to provide assistance to several or all of their schools at once. Site-based coaching offered a more individualized form of assistance.

In 2003-04, systematic school coaching relationships were few and far between. MCNC had the most comprehensive coaching plan in place. By 2004-05, however, several intermediaries were using school coaches as an integral part of their support to sites. School coaches provided assistance across a variety of areas, including meeting the ECHSI benchmarks for success, curriculum development, professional development, budgeting, and other start-up issues. In most cases, the ECHS coaches were retired teachers, administrators, and even superintendents. It is interesting to note that because Middle Colleges are some of the most established models for blending high school and college, MCNC teachers and principals were sought out not only by MCNC, but also by other intermediaries to support developing ECHSs.

The intermediaries had different levels of capacity to provide coaches to their ECHSs. MCNC coaches were in the schools regularly and frequently, which enabled them to identify and respond to schools' concerns in a timely manner. One intermediary intended for coaches to visit schools regularly and for several days at a time, but was unable to reach that goal because of geography and funding constraints. For another intermediary, coaching was not standardized, and coaches were assigned depending on the specific needs of the school. Coaches spent an average of six days per month in most affiliated schools. However, one particularly successful school received little coaching, which was a source of discontent for the teachers and leaders there. Coaching was even less regular with one intermediary because it chose to direct most of its grant money to schools and did not have many funds remaining to provide support.

As the number of ECHSs grows and intermediaries find themselves with ECHSs at different stages of development, more intermediaries are facing a decision about the level of support to provide to their various schools. One strategy is to provide customized or differentiated assistance. Under this approach, each school would receive the type and amount of support it needed as it matured. UP and KWF for instance, said that they provide assistance on a site-by-site basis. In a related vein, FCCC is developing a five-year professional development plan for each of its schools. Another strategy is to develop a plan of supports based on the development stage.

For example, MCNC reported that their coaches made monthly visits to established schools, whereas new schools received two visits each month. NCLR described "a continuum of experiences" from planning through implementation. In the planning and pre-opening phases, the intermediary's assistance focused on organizational coaching and curriculum; it shifted its support to instruction in the first two years of implementation.

> In 2004-05, intermediaries started to address how to support ECHSs no longer receiving foundation support.

All intermediaries expressed a desire to continue supporting a school after its ECHSI grant is over, but few had well-articulated strategies for doing so. Antioch and MCNC were planning to allow non-funded schools to continue to participate in the intermediaries' ECHS networks. Similarly, CUNY planned to develop a network of its ECHSs as a sustainability strategy. NCLR intended to continue supporting its schools, but expected the level of support to drop after the grant ended. An NCLR representative said that at a minimum, its affiliates will receive technical assistance through the NCLR national conference.

Networks

Intermediaries used ECHS networks as another support mechanism. Indeed, nearly all intermediaries had created or had specific plans to create some kind of forum for their ECHSs to come together. Although more intermediaries were providing these opportunities than in 2003-04, the robustness of the networks varied in 2004-05. For some intermediaries, the networks were established and effective. Other networks were nascent or not yet deeply rooted, especially for intermediaries with fewer schools or relatively thin support structures.

In the most common form of networking, representatives from all schools supported by the intermediary come together at conferences, retreats, or regular meetings (including conference calls) to share their experiences, problems, or approaches. Some of the established intermediaries provided more individualized networking opportunities. These intermediaries had brokered one-on-one relationships between their ECHSs to match schools' specific strengths and needs. For instance, a WWNFF college leader said, "[WWNFF] put us in touch with a school that has developed a really nice assessment plan, and they have put people in touch with us for our strengths."

Consistent with the finding of Payne & Kaba (2001) that teachers benefit from contact with others who have already implemented a new program, nearly all teachers and school leaders interviewed appreciated whatever networking opportunities their intermediaries provided. Several ECHS leaders and teachers mentioned that the opportunity to come together and share was the most valuable form of assistance that the intermediary provided. An MCNC ECHS leader, who visited another ECHS as part of her principal training, found it particularly helpful to see an established school when her school was in its infancy. She explained, "It just blew my mind…That just transformed me…That was just what I needed to see. I just loved what was going on there and I wanted to take all of my teachers…"

Policy support

Another way intermediaries support their ECHSs is by continuing their work to create supportive policy environments. Researchers have identified dual enrollment policies as crucial to the success of programs such as the ECHSI (Karp, Bailey, Hughes, & Fermin, 2004). The policy

issues for ECHSs this year were largely similar to those identified in last year's report (AIR/SRI, 2005b): dual enrollment, seat-time requirements, admissions requirements, transfer of college credits, and funding.

Policy Issues Impacting the ECHSI

Admissions requirements: In the context of intermediaries' work on state or local policies, admissions requirements refer primarily to ECHS students' eligibility to take college courses.

Dual enrollment: Dual enrollment refers to students' enrollment in high school and college at the same time. Several policy issues surround dual enrollment, including whether students are eligible for college courses, the number of college courses that they can take at any one time, the total proportion of high school students allowed in college courses, how dually enrolled students affect the ECHSs' funding levels, and whether students' college courses are funded under traditional secondary formulas.

Seat time: Seat time is the physical presence of a student in a school setting. Funding formulas that are based on seat time can adversely affect ECHSs if college courses are not counted toward ECHS students' seat time requirements. In addition, it can be difficult to balance the state's seat time requirements for high school students with the availability of college courses for which ECHS students are eligible.

Transfer of college credits: At this point in the initiative, it is unclear what will happen with the college credits that students earn through their ECHSs. Several intermediaries are focused on how many and which credits will be transferable to the IHE associated with the ECHS, and which credits will be accepted by other colleges and universities.

The most common approach to addressing policy issues is to work to change existing regulations. Many ECHS leaders see the regulatory focus as appropriate for intermediaries, and indicated they would like to see more efforts along those lines. Some interviewed ECHS leaders believe that the intermediaries should be doing more in this regard. For instance, a college leader said of one intermediary, "I think [the intermediary] should be in charge of finding sources to fund this project, because this project is expensive. …They need to get someone to go to the state and get us some set-asides. There is a lot of pork out there. We need to get some pork."

In 2004-05, several factors aided the intermediaries' policy work. A few intermediaries had organizational structures or histories that afforded them access to high-powered problem solvers at the state or district level. As one example, CUNY has a long history of working on policy matters with the New York City School District. According to the CUNY intermediary, "Our relationship with the Central Office is very strong. We interact mostly on policy setting for the entire district…They try to cut the red tape for us." In the case of NCNSP, North Carolina policymakers understood and supported the initiative.

Accountability

As discussed earlier, accountability has become an increasingly important focus for the foundation as the ECHSI progresses. Spurred in part by JFF's heightened role in accountability, in 2004-05 intermediaries seemed more comfortable balancing the dual roles of providing support to ECHSs and holding them accountable for their progress. For example, several intermediaries

established or were in the process of establishing benchmarks for their ECHSs based on the initial benchmarks developed in conjunction with JFF.

> Accountability for ECHSs increased this year, yet few intermediaries have planned consequences or strategies if ECHSs do not meet benchmarks.

A few intermediaries tied their technical assistance to their accountability reviews. From the intermediaries' perspective, linking their support to accountability measures had the dual benefits of enabling them to provide customized assistance that would help schools meet their goals, and providing a mechanism for the intermediaries to be accountable to the sites. In this regard, an NCLR representative said that their benchmark document was "articulated enough that we can assess where we've been weak in technical assistance."

Two intermediaries considered strategies that would require ECHSs to leave the ECHSI if they did not make sufficient progress. For one, the strategy was clearly tied to the benchmarks. When discussing the strategy, an intermediary representative said, "If schools cannot realize their benchmarks, then they will not move forward." In contrast, another intermediary did not describe a specific strategy. However, at the time of the 2004-05 data collection, the intermediary was preparing to discontinue funding for one school whose progress and commitment to the ECHSI were judged not sufficient. Similarly, one intermediary dissolved its relationship with one of its schools because of conflicts between its vision and the school's implementation of the ECHS.

Capacity

> Intermediaries reported mixed views about their capacity to support their schools. Hence, many intermediaries sought additional funding.

The intermediaries' ability to provide sustained, high-quality support to their ECHSs hinges largely on their staffing and financial capacities. In terms of finances, intermediaries had mixed views of their capacity to support their schools: some expressed satisfaction and others expressed concern. For instance, several intermediaries believed that they have the necessary financial resources to carry out their work. Yet most of those intermediaries were seeking additional funding, either from the foundation or from other sources. On the other hand, some intermediaries did not believe that they had sufficient financial resources. An intermediary representative said that the organization was asking for "a significant increase in funds from the foundation for technical assistance on the ground and to fund an evaluation of a statewide network."

When considering how best to support their schools, intermediaries face an important decision about how much of their funding to direct to the schools and how much to keep for the organization. Directing more money into the schools, particularly for intermediaries with fewer resources, often comes at the cost of supporting those schools. Although the ECHS partners believed that this approach was laudable and well-intended, they also acknowledged that it reduced the capacity of intermediaries to provide assistance. An interemediary representative noted that they had originally reduced the percentage of the grant they allocated for themselves from 33 to 30 percent, which they found compromised their ability to support their schools. As a result, according to this representative, "We're taking the full 33 percent so we can provide more professional development."

Nine intermediaries hired additional staff or consultants since 2003-04. Some newer intermediaries such as CUNY, NCNSP, THSP, and UGS, increased their initial staff by 100 percent or more as they established themselves. Supplemental funding from the foundation alleviated the concerns that GTC and NCLR noted in 2003-2004 about their staffing capacity. Even with this hiring boom, six intermediaries expressed a desire for additional staff or mentioned that they had openings. Areas of need include fundraising specialists, program directors and managers, data analysts, school coaches, public relations experts, and policy experts.

Intermediaries adopted a variety of strategies to extend their capacity rather than hire new staff. For instance, several intermediaries hired retired teachers or administrators as consultants, primarily to serve as coaches in the schools. One intermediary plans to partner with external organizations to provide professional development and other assistance beyond the intermediary's area of expertise. Other intermediaries divided or shifted internal responsibilities. One intermediary recently moved its Early College work into a broader statewide high school reform initiative—a move that some ECHS leaders thought might lead to the ECHSI getting lost within the larger reform efforts. Finally, intermediaries with a network of more established schools had these schools serve as a source of support and assistance for each other—an approach that was intended to double as a strategy for continuing to support schools once they were no longer funded.

Chapter Summary

Over the life of the ECHSI, the foundation, JFF, and the intermediaries have gained a deeper understanding of the conditions required for ECHSs to be successfully implemented and sustained. Without changing its overall vision, the initiative has moved toward greater specificity in its expectations for intermediary groups and the schools that they are developing. JFF works with the foundation to communicate the ECHSI priorities and principles to the intermediaries. In turn, the intermediaries continue to refine their approaches to selecting new ECHS sites and supporting and monitoring their existing ECHSs. Along with the increased specificity has come a greater emphasis on accountability, which was an especially strong focus for JFF and intermediaries. It appears that some of these refinements have begun to manifest themselves in various aspects of the school-level implementation of the ECHSI, which we describe in the following chapters. Following is a summary of some of the findings from this chapter.

- The foundation and JFF have encouraged intermediaries to develop more prescriptive ECHS designs to facilitate implementation and replication. In response, intermediaries have added a variety of specifications in several different areas: implementation strategy, physical location, target population, and curricular focus.

- Intermediaries continued to refine their approaches to selecting new ECHS sites and supporting and monitoring existing ECHSs. Approaches intermediaries used to select potential sites ranged from broadly disseminated Requests for Proposals (RFPs) to highly targeted site selection. Many intermediaries reported that a new benchmark document (the development of which was overseen by JFF) was useful in determining the viability of potential ECHSs.

- Intermediaries used different formulas to distribute their grant funds. Many intermediaries have formulas in which they keep a significant portion of the grant to partially fund the technical assistance they provide to ECHSs, and several intermediaries have increased this percentage over time. Other intermediaries have chosen to direct a significant portion of the initiative's funding to the schools. Although the schools appreciated the funding, the intermediaries found that their capacity to provide technical assistance was therefore reduced.

- Some intermediaries struggled with how to support ECHSs whose grants have ended. Many times, the end of grant funding coincides with students' first foray into college classes. Most intermediaries plan to reduce on-site support while continuing their support of the ECHSs through participation in network activities.

- In 2004-05, the foundation, JFF, and the intermediaries increased their focus on accountability. Most intermediaries have developed benchmarks to measure their schools' progress; however, few of them have deliberate plans for working with schools that are not showing adequate progress or planned consequences for ECHSs who are not meeting the benchmarks.

- A Student Information System (SIS) is being developed to aid all participating organizations in tracking the accountability of ECHSI. Intermediaries have pledged their schools' full participation in the data collection efforts. The SIS will include data on individual student characteristics (e.g., demographics, assessment scores, course-taking) as well as school-level data.

- A majority of ECHSs have MOUs in place, but there is some tension between short-term agreements and developing longer term agreements. The short term agreements may leave the ECHS at risk in the future, while long-term agreements may become irrelevant as the partnerships develop and evolve.

CHAPTER III: ECHS Building Blocks

Once the intermediaries have laid the foundation for the ECHSs, the local partners (high schools, districts, IHEs, and community-based organizations) bear the responsibility for building effective ECHSs. The first part of this chapter provides descriptive information relating to the ECHSI specification that local partnerships, including at least one postsecondary partner, develop and oversee ECHSs. This chapter also focuses on the resources, both financial and human, that schools can use to help them reach the challenging goals of a fully implemented ECHS.

ECHS-IHE Partnerships

At the core of each ECHS is a local partnership that must involve at least one IHE working with another entity that may be a school district, a charter school, a community-based organization or some other organization. In some cases, the local partnership may include several groups and organizations. Whatever the partnership configuration, key representatives must work together to come to organizational, financial, and academic decisions in order to give an ECHS a solid start. However, building a strong working relationship within a partnership can be challenging. Some factors influencing the quality of partner relations and effectiveness include: any longstanding relationships that were in place before the ECHS, the degree to which leaders hold equally senior positions within their organizations, and the degree of faculty support for the ECHS design.

In some instances, an existing relationship between a high school and a college may facilitate establishment of an ECHS. For example, an intermediary attributed one ECHS' relatively smooth start to an established longstanding relationship between the high school and the college:

> *They're a good example of a good integration between high school and college…There are deep connections. [It] had a stable staff for many years. No surprise they were able to quickly adjust [when the president, who was the founder, left].*

Among the existing Middle Colleges that are adapting to ECHSs, an existing relationship between the high school and the college has provided a firm foundation on which to base planning and implementation. As one district leader described it, "[The district and the college] have had a formal partnership for a number of years. Both institutions were interested in this replication project and so the application was made. Once we were selected as a replication site, the issue became working on the details."

Sometimes, however, a pre-existing relationship between a high school and a college can work to the disadvantage of the ECHS. One principal had to work to overcome a history of animosity between the high school and IHE, even though they had been affiliated with each other for nearly 20 years: "When I came here I thought there was this collaboration with the college all the time. But [the high school and college] have been fighting over space and resources for years…This program is new to the school and to the college. Very few kids took college courses before. The relationship had more animosity than amicability."

> IHE-ECHS partnerships are facilitated when both sides are represented by leaders with equal and high standing in their organization.

When partnerships required developing new relationships, it was important that each side be represented by leaders with equal standing within their organization. An intermediary representative described the importance of having equal representation (with the district representing the ECHS' interests): "The leadership at the district and at the college has to be equal. You can't have a president and a smaller community coordinator being the lead agents. It at least has to be into that VP level at the college and the assistant superintendent level. That's where we've seen the greatest progress."

> For IHE-ECHS partnerships to thrive, IHE tenure and promotion systems need to encourage faculty support and participation.

A third factor influencing the quality of partnerships between the ECHSs and IHEs is the degree of college faculty support. In 2003-04 and 2004-05, intermediaries noted that research-oriented IHEs presented unique challenges in that regard. A WWNFF representative said, "The hardest relationship is with the major research university. The faculty do have an interest in teaching, but the reward system for research universities, there is nothing in retention, promotion, and tenure for this sort of thing. You almost have to get instructors that are tenured to make this model work, because the others are too timid." At IHEs other than research institutions, faculty buy-in was also cited as influencing the quality of the partnership between the ECHS and the IHE. Of one ECHS, a representative from CUNY said, "The buy-in of the faculty is impressive so far. It is not just the education school that is participating. There are deans and department chairs from a wide representation of the campus participating." The issue of faculty support and interest is so important that JFF cites this as a key area of development for the success of the ECHSI. A JFF representative noted, "The institution of higher education relationship is a huge hurdle. Faculty come and go. We need to look at tenure and promotion systems and build in agreements about faculty rewards that most partnerships in this country have not been successful in winning."

Extending the Local Partnership

While the core local partnership for an ECHS is focused on a high school-college collaboration, most ECHSs maintain relationships with a variety of local partners. Often, the mechanism for involving multiple stakeholder groups is an advisory board. Of the 44 ECHSs responding to the 2004-05 survey item, 41 indicated that they had advisory or governing boards. Of the 41 ECHSs with governing boards, the most common constituency groups making up the boards were ECHS administrators, college administrators, ECHS instructors, and district representatives. However, as Exhibit 5 depicts, a substantial proportion of the schools include other parties.

Exhibit 5: Constituency Groups on ECHS Advisory Boards, 2004-05
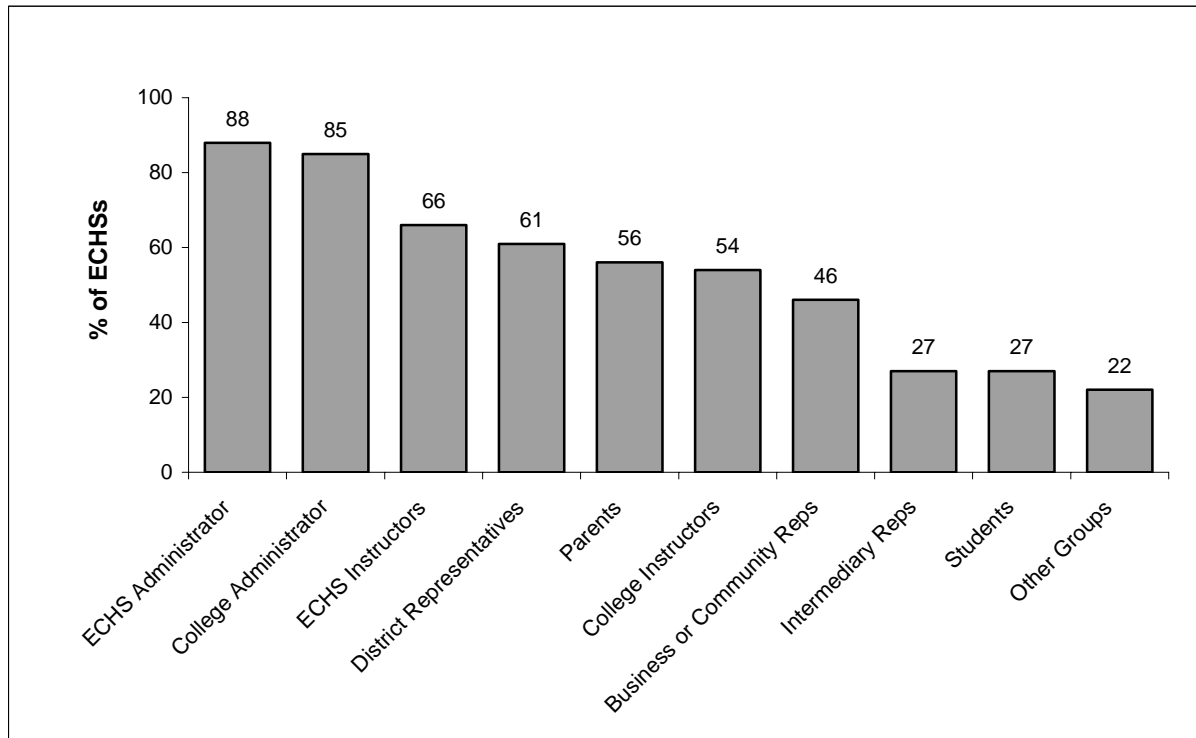
Note: n= 41

In addition to representatives from the ECHSs, colleges, and districts, other members of the community can participate in the development and planning of ECHSs, including businesses, community leaders, parents, and students. For example, one ECHS leader said, "[The advisory board] meets on a regular basis. There are people from the community college, parents, students, staff. That goes well." Another ECHS leader noted that the community liaison, who was affiliated with a local church, was particularly supportive: "She provides support when attendance becomes a problem. She can also help with getting into home visits when there are issues."

Governing Boards: An Example

One ECHS has a nine member governing board that includes four representatives from the district, four from the community college (and a ninth with unknown affiliation). Monthly board meetings are attended by the ECHS director, an ECHS guidance counselor, and others (including a representative from a contracted financial agency that handles the budget).

The board's role is decision-making: the calendar, school and student policies, discipline, and the budget (but not grant writing). One board member suggested that the board's role is still evolving: "As a board, we need to realize that we are a board of directors and need to take ownership; not micromanage, but be involved."

Sharing the Vision of ECHSI within a Partnership

Based on interviews conducted in 2004-05, the basic vision of the ECHSI was well understood by all of the partners. However, some ECHS leaders articulated tensions concerning how that vision would be implemented at their specific sites. One intermediary described the existing conflict at one ECHS: "A trouble spot is the president of the college who has agreed to 60 credits [two years' worth of college credits], but is difficult to deal with and has not adopted the full EC model." Another ECHS seemed to be working through some differences of opinion in implementation strategies. According to a college leader, "The relationships between all…have really come a long way this year. To have everyone agree on the vision and how it would be implemented was a huge challenge. There has been a lot of work done on that, and we've made progress." A high school leader also attributed the smooth implementation of ECHSI to those who have been involved in the partnership since the beginning: "The college seemed to involve the key players early on. It precedes my position here. They are in line with what this needed to look like. The president and the deans are very supportive… There's a lot of collaboration and similar vision."

The Roles of School Districts as Partners

Although investigating the roles of school districts in ECHSs was not an emphasis in the evaluation data collection for either 2003-04 or 2004-05, enough information is available to suggest that districts are playing various support roles in the implementation of the ECHSI. Analyses of qualitative data revealed that for some of the ECHSs, district involvement included the roles of funder, service provider, initiator, and sustainer.

The roles most frequently assumed by districts were that of funder—one district funded its ECHS 100 percent—or provider of other services, such as curriculum support or policy advisor. For example, as part of New York City's overall effort to create a portfolio of high schools, the school district supports a small high school movement that is broader than the ECHSI and is assisting four intermediaries to establish ECHSs. In some cases, districts initiated the ECHSI to fill educational gaps for targeted populations. In one case, the district started the ECHS to serve the needs of the American Indian population. Along similar lines, some districts also played important roles in sustaining the ECHS. For example, at one ECHS, the district superintendent helped keep students enrolled by personally calling students he thought might drop out.

Interviewed ECHS staff reported that districts fulfilled their roles with varying degrees of consistency. At one end of the spectrum, a leader at one ECHS noted the help the district provided, which included "materials, personnel, and overall support." Other ECHS leaders, however, did not think their districts were as supportive. A teacher at one ECHS articulated, "The city district forgets we're up here, I think. … It's like we're an afterthought." Another school leader added that one of the biggest challenges the school faced with the district was with funding, which was delayed in district bureaucracy: "Our vision was that we would have all of these things available when we started the school year, but the budgets didn't become available until [later]. As far as the supplies and the ECHS teachers, their vision was that they were going to have things available. That caused some morale issues."

> ECHSs that were located on their own facility tended to report more difficult relationships with their districts.

Interestingly, the majority of the interviewed schools citing problems with the district are located in their own building. The schools that report a more supportive relationship with the district are located either on a college campus or in a shared facility. A possible reason for this finding may be that having a separate facility increases funding and support demands. An ECHS sharing a campus presumably would have fewer facilities needs than one in its own building.

Charter Schools

Another layer of complexity in understanding ECHS-district relationships is the fact that about one-third of current ECHSs are charter schools. In fact, all ECHSs associated with UP and most associated with NCLR are charter schools. In order to understand the nature of the ECHS-district relationship, it is important to understand charter status.

Many intermediaries encouraged ECHSs to obtain charter status so they could have autonomy in hiring, staffing, and selecting curriculum. An ECHS leader said, "We have just a very loose relationship with the district. As an independent charter we pretty much run everything ourselves. … All of our public money runs through the district … so in that respect we are considered a dependent charter."

> It does not always make sense for ECHSs to be independent charter schools (which are often freer of restrictions with regard to staffing and curriculum). One intermediary representative stated that whether an ECHS should be a charter or not depends in large part on the existing relationship between the IHE partner and the school district.

The dynamics between a school district and the charter schools in its jurisdiction can range from helpful to hostile. A representative from UP said, "Almost without exception, the districts have been helpful…They are partners and cooperating, and that cooperation is increasing …There was considerable opposition in districts to charter schools. We were able to overcome that." Another ECHS struggled with its district. According to a leader at this school, "The district had given us money to make the facility and then they reneged because they got political pressure from principals at traditional high schools [in the district]." A student echoed the sentiment and said, "The district doesn't support our school—we have battled with them from the beginning."

Making the decision to use the charter school option in opening a new ECHS was not always clear cut. Addressing this issue, a representative from FCCC stated:

> *In California, with our community college system, each of the colleges is so independent. This system doesn't really offer a system. Each college really has the ability to set its own policies. Their relationship with their school districts affects how important school set-up is within that school district. If the college already has a working relationship with the school district, then it makes sense for the new school to be closer aligned with the school district. If they don't, then it makes sense for them to be a charter.*

As these examples show, it is difficult to determine what aspects of the ECHS-district relationship can be attributed directly to an ECHS' charter status.

Shared Decision-making

In general, several key players make initial decisions regarding the design and implementation of budding ECHSs. Once a school is more established, the number of decisionmakers tends to expand. As noted earlier, a majority of the ECHSs are governed by some form of advisory or governing board, including representatives affiliated with both the high school and the partnering college or university and sometimes representatives of other stakeholder groups. These committees usually meet several times during the year to discuss issues and challenges encountered by the schools. Representatives from each partner participate in making school-level decisions. In one particular ECHS located on an IHE campus, the school was governed by a Board of Directors. The directors on this board were neither employees of the community college nor of the school district. In order to provide more objective decisions for the school, the college leader did not have voting power even though she was a member of the board.

For the most part, interviewed ECHS leaders felt that the partners split the management responsibilities appropriately. As noted in the intermediaries section of the previous chapter, several adaptation schools had longstanding relationships between the partners, and therefore did not experience major conflicts even if the MOU was not up-to-date.

There were a few interviewed high school leaders that felt that the IHEs were not involved enough and that the high schools had to assume the bulk of the work. A high school leader provided an example where an appointed IHE representative was consistently not available to participate in planned activities: "She's basically not fulfilling her part of the bargain. I told the president, and he said he'd name someone else…Fifty percent of that job falls to me to make the in-roads and to make those things work." An IHE leader admitted, "There is differential sharing—some partners have more vested [interests] than others, so they commit more. Clearly everybody is committing their time and resources and doing that as appropriate to their partnership roles." The implication here is that the IHE is currently less committed than other partners. Nevertheless, this leader went on to say that the level of involvement could shift as students progress in the program, particularly as enrollment in college courses increases.

Some partnerships between an ECHS and its IHE are new relationships that need to be defined, often formally with an MOU. There are sometimes "growing pains" as the parameters of the relationships are established.

On the other hand, a group of program schools, schools that are implementing an Early College program within an existing high school, acknowledged a tilt in power toward the IHE. One high school leader reported that the decision-making roles between the IHE and the ECHSs had not been properly defined, and there were slight feelings of tension because the IHE had usurped a lot of the decision-making power. The high school leader said, "I think they think some decisions are being made at the IHE and handed down. And I think there is some animosity there. But I think it's growing pains." The college leader confirmed, "The ECHS administrators aren't making as many decisions as they need to make, but that will come with time. I think everyone was feeling their way out."

Resources

In building an ECHS, resources are the primary driver of many decisions. These concerns cover both financial and human resources. As small schools with low enrollments, the current financial situation in many districts has put ECHSs in a challenging position. Additionally, many ECHSs struggle to not only find the financial resources to hire adequate staff, but also to make sure that the environment is set up in a way to get the most out of their staff. In other words, not only do ECHSs need qualified staff, but also they need to continue to invest in their staff through professional development and a strong positive professional community. Finally, as new ECHSs start to turn their attention to their life beyond the grant period, sustainability becomes an increasing concern.

Financial Resources

Nationwide budget cuts and budget delays in education are having an impact on elementary and high schools (Lav & Johnson, 2003). New and reforming schools are particularly sensitive to these financial changes. AIR/SRI's evaluation of the Bill & Melinda Gates Foundation's High School Grants (2005a) found that these budget cuts and deficits had "deleterious effects on schools in general and on still-developing innovative schools in particular." As representatives of new and reforming high schools, interviewed ECHS leaders made it clear that these budget cuts had an impact on facilities, staffing, tuition, transportation and supplies, among other things. Leaders at one ECHS had hoped to purchase real estate on which to build their school, but budget constraints have forced them to resort to using portables on the college campus. Another school leader said, "I had to give up the budget for [an on-site administrator] to keep the teachers because of the drop in enrollment."

Unlike other new and reforming high schools, ECHSs have the extra challenge of finding funding for costs related to the provision of college courses. In Utah for example, there is one funding pot for IHE enrollment, but because there are more students drawing on the funds each successive year, the amount available for each student is reduced yearly. One IHE leader found the challenge of funding the college-related costs overwhelming: "Funding is a nightmare and next to impossible…In a state where you are at a state [charter] school, and the budget is regularly cut, there are no dollars available from anywhere to pay for tuition, fees, books, transportation, etc… It would cost $250,000-$300,000 a year, and the university can't take that on."

Of particular concern to many ECHSs was finding funding for college texts and materials—costs typically covered by college students. At the majority of the sampled ECHSs, either the schools or the IHEs pay for college textbooks. However, according to interviewed school leaders, teachers, and students, they are prohibitively expensive. At some ECHSs, the dollar amount allocated for purchasing textbooks was not adequate and funds needed to be raised to supplement these costs. An ECHS leader explained that originally the brochures distributed to the students explained that there would be no cost associated with textbooks: "As they are looking at funding, they say they will pay $150 for books. Well, that is the cost of one college textbook. So if that stays in place, the parents will be paying $400 a year for textbooks. That could be a problem since a lot of the families are low-income, especially when they were under the impression it would cost nothing." One ECHS had some short-term solutions in place (e.g., students in the summer program raised funds for books and transportation, and the Chancellor's office tried to find waivers), but the leader remained concerned. At another ECHS, a college leader reported that the

principal worked out a way to get the initial textbooks paid for, but "the difficult thing, though, is that college faculty are always changing books, [so they can't always be reused]. [The principal] has to scurry to find funds to offset the cost of books."

Human Resources

> Many ECHSs have had to work with fewer staff members than they would like due to their small enrollment (and subsequent low funding amounts based on enrollment). Some ECHSs made cuts in leadership staff in order to put more resources in the classroom, an imperfect solution to a shortage of resources.

Building a successful ECHS requires enough appropriate staff to do the work. The 2004-05 survey results indicated a higher percentage of ECHSs reporting at least one FTE school leader (91 percent, n=45) than in 2003-04 (86 percent, n=21), and the median student-teacher ratio remained the same (about 16 students per teacher, n=43).[10] Despite this increase, there is still a shortage of staff to do the work. A leader said, "To make this thing work, we need more human bodies present. But that's financially probably not possible."

Although most ECHSs had at least one full-time administrator, two of the ECHSs located on their own site only had part of an administrator's time, and interviews with ECHS teachers and leaders suggested that these new schools needed more than a partial administrator to lead the implementation process. These findings are consistent with AIR/SRI's evaluation of the Bill & Melinda Gates Foundation's High School Grants (AIR/SRI, 2005a) and findings from last year's ECHSI report (AIR/SRI, 2005b). Although instructors appreciate the efforts to focus staffing resources on "the front line," staff at some schools felt that there was not enough leadership support and that leaders were spread too thin. At one very small ECHS, the absence of an on-site administrator combined with a relatively inexperienced staff (i.e., average of three to four years of experience) led to delays in handling student discipline problems and teacher evaluations. An intermediary representative succinctly stated the general concerns about instructional leadership: "Another challenge I see is in some cases we don't have full-time instructional leadership. You have part-time administrators, and it can complicate the implementation process…I'm very concerned about how effective or successful we'll be when we have part-time leadership."

Some sampled ECHSs met staffing challenges because their implementation plan called for at least some high school instructors with the credentials to teach postsecondary courses. In 2003-04 there were no reports of any problems, but in 2004-05, more high school teachers and college instructors were needed to teach the additional high school courses and to cover the introduction of college-level courses. As a leader of one ECHS stated, "The future of an ECHS hinges on finding certified teachers who can teach at the college level. In this state, it's hard to offer those classes in the high school setting."

The evaluation team did not have access to data that would show the level of teacher and administrator turnover across all ECHSs, but during interviews at some sampled ECHSs, staff noted that the loss of administrators and/or teachers had been a major barrier (see text box). A district leader who was concerned about the consistency of the staff at an ECHS noted, "The

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[10] As noted in the Introduction, when survey results are included in the report, the total number of ECHSs providing data on each particular survey item is reported.

instruction has to be more personal, with more one-to-one and more supports, and there needs to be a safe setting which would be facilitated by a more stable staff. There need to be consistent staff in order to build relationships."

Staff Turnover: The Worst-Case Scenario

One ECHS experienced a turnover crisis that started in earnest when the leader left during the first semester the school was open. After the ECHS leader left, the leader from the affiliated middle school was left to assume oversight of both the middle and high schools. The instructors, almost all of whom had less than three years of experience, felt overburdened and unsupported, and many started to leave. Their departure left more work for the remaining instructors, so eventually more instructors left. Throughout the first year, a large percentage of the staff left the school. The exodus took a toll on the students; they reported feeling sad that teachers were leaving and felt that their relationships with the teachers were not respected when the disappearances were not discussed with them. It is easy to see how an avalanche of negative effects can occur in schools with high staff turnover.

Of course, teacher turnover is a major concern in schools that depend on strong adult-student relationships for student success. In their investigation of two ECHSs, Foster and Nakkula (2005) noted that these schools experienced high turnover due to the extraordinary demands placed on teachers. They recommended that ECHSs develop a plan for supporting instructors, not just for supporting students.

Professional development

> Professional development for IHE instructors lagged behind opportunities for ECHS teachers. There is a need for joint collaborative professional development for ECHS and IHE instructors as well.

In addition to hiring staff, ECHS leaders are responsible for providing additional training so that instructors have the skills to successfully implement the challenging curriculum and to support the students in a blended high school-college program. Professional development for instructors at sampled ECHSs took a number of forms, including stand-alone workshops and seminars, conferences, site visits to other ECHSs, and retreats. Topics included literacy, technology implementation, curriculum writing, diversity, cross-curricular instruction, and service learning.

Although professional development for ECHS instructors is a priority for almost all ECHSs, professional development for IHE instructors was rarely implemented in the sampled ECHSs. In the few schools where professional development was available to IHE instructors, they usually received training apart from the high school instructors. At one sampled ECHS, joint high school-IHE professional development is a feature of the MOU, but it has yet to be implemented. At another sampled ECHS, professional development is offered separately for the two faculty groups, but the principal was working on developing workshops to share strategies and to talk about the differences in the college and high school environments.

Similar to last year, the professional development topics most desired by interviewed ECHS instructors included: technology implementation, curriculum planning, inquiry-based and discovery learning, and working with students who have low basic skill levels. ECHS instructors seemed enthusiastic about incorporating more interdisciplinary lessons and active inquiry

approaches to instruction, but were cognizant that they needed more training to be successful. Interviewed IHE instructors expressed the desire for more training on strategies for dealing with younger students.

> Just as ECHS teaching emphasizes being "real and relevant," ECHS teachers' professional development and training opportunities need to be more integrated into the teachers' experience and less "lecture-oriented."

Although most interviewed ECHS staff members were satisfied with the professional development opportunities they received, there is evidence that ECHSs still need to improve the quality of their professional development programs. Payne & Kaba (2001) found that one reason many school-wide urban reform efforts have been unsuccessful is that the staff do not have time to share information and reflect on their work; as a result, the staff do not learn from experience. Effective staff development "should be responsive to teacher-identified needs, be school-based and built into basic school operations and not another add-on, be content-rich, be on-going, and help teachers develop a theoretical understanding of their work" (p. 9). Most of the professional development described by ECHS instructors was in the form of stand-alone seminars and workshops, as opposed to ongoing training. A final concern from some ECHS teachers was the lack of financial compensation for their participation in professional development. The introduction of professional development time as part of the regular staff schedule, and the growth of a strong professional community within the ECHS could allow staff to receive ongoing feedback, give them time to reflect and improve their practice, and would allow that time to be covered within the normal school day.

Professional community

> Many ECHS teachers credit common planning time as key to their ability to enact the reform envisioned as part of the ECHSI; and some teachers without common planning time noted this as a barrier to successful implementation of reform.

A strong body of research links successful high school reform to the fostering of collegial relationships and collaborative problem solving (see Little & McLaughlin, 1993). One of the primary mechanisms through which many ECHSs have developed collegiality and ensured collaboration is the establishment of common planning time for teachers. Teachers utilized their common planning time in a variety of ways including coordinating lessons, discussing student progress, and conferring with students. As suggested above, this time also can be used for professional learning.

Teachers at sampled ECHSs that have implemented common planning time were almost unanimously pleased with it. For many teachers, this was a new opportunity and one they saw having a positive impact on their teaching. Instructors at ECHSs that have yet to implement a mechanism for common planning time often express frustration. One teacher felt that without common planning time, the ECHS will be just like any other high school: "They want us to be different, but without getting the necessary training and planning time, we end up looking like everyone else. As a staff, we are innovative and smart enough, but we have no built-in time to plan."

ECHSs have the extra challenge to develop professional communities that are not bound by location, but instead cross the secondary and postsecondary systems. There were few examples of high school and college instructor collaboration in sampled ECHSs. At one ECHS, three classes

were co-taught by ECHS and IHE instructors. A teacher at the school said, "The collaboration with college professors is going well and will continue to gel." At another school, a high school instructor in her first full year of teaching reported receiving a lot of support and materials from the science departments at the IHE. However, she further explained that she was the only ECHS teacher who interacted with college faculty, because she made those connections during her years in graduate school. In the few examples of successful ECHS-IHE faculty relationships, many pre-dated the ECHS. For example, another high school teacher interacted with the college department because his wife taught there; others in the same ECHS did not have any interactions with the college faculty.

> ECHSs could benefit from successful models of high school-IHE instructor collaboration, where both levels of instructors feel valued.

For some sampled ECHSs, ECHS-IHE faculty collaboration was hindered by a number of obstacles, such as time constraints. At one IHE, many of the college instructors were adjunct professors who were not at the IHE full time, which limited their availability for collaboration with ECHS staff. An even bigger obstacle to successful collaboration is the disparity in value that several interviewed ECHS instructors perceived in their relationship with IHE faculty: "The college professor doesn't rely on me. She is the top, and I am the bottom, and it doesn't feel like an equal partnership. She changed her syllabus twice and didn't tell me." When asked about co-teaching with an IHE professor, a teacher said, "Teachers are becoming tutors and not teachers…" Clearly defining the roles of ECHS and IHE faculty before engaging in a co-teaching situation, and providing ample opportunities for the two groups to communicate, could improve this perception of an unequal relationship and foster more collegiality between the two groups.

An integral aspect of professional community is the involvement of high school and IHE instructional staff in the ECHS decision-making process. Effective high school reform "cannot be undertaken by a faculty that is not convinced and involved…Only in a small school can deep ongoing discussion take place in ways that produce change and involve the entire faculty" (Meier, 2005). Of the ECHSs that have an advisory board, 66 percent reported having ECHS instructor representation, while 54 percent had IHE instructors as board members (n=41). Many sampled ECHSs tried to involve instructors in the crucial decisions that were made during implementation, and many teachers favorably viewed their level of involvement in decision-making at their ECHS and reported inclusion in decisions pertaining to their students, subject area, and curriculum.

> ECHS instructors need enough decision-making responsibility to feel invested and valued, but not so much that their leadership burden detracts from their primary responsibility: teaching.

The main challenge in involving instructional faculty in a shared decision-making process revolves around giving teachers enough responsibility to feel invested, valued and involved in the ECHS, without giving them more responsibility than they can handle. Some sampled schools were having success achieving this balance. A teacher acknowledged, "I have a fair amount of decision-making up to my level of management in this organization as a whole…Sometimes I feel things are handed down to us, but that's going to happen, that's what organizations are all about." At other schools, teachers were more critical: "None of [the ECHS teachers] were a part of [the planning]…many of us feel that is rather inadequate." At an ECHS that had experienced a change in leadership, the new principal admitted, "When I got here, I never got the impression that the teachers were given the opportunity to speak up. There wasn't enough trust built up." The lack of teacher involvement was one of the first issues he addressed: "That was one of the key things we

did—we gave the faculty a voice. The faculty is beginning to have a lot more voice in decision-making…What's happening is very exciting for me. It's a big change in the culture of the school."

The rush to open an ECHS can also create obstacles to effective inclusion of instructional faculty in shared decision-making. Teachers at sampled ECHSs were often hired after major decisions were made. When asked about the problems of high school and IHE faculty support for the ECHS, an IHE leader noted, "Because the grant was written over the summer, we didn't have the degree of faculty input we should have." A similar situation occurred at another ECHS, where an IHE leader felt, "When things happen in a big hurry, they don't always get done in as thoughtful a way…Teachers might not have felt in the loop…lots of decisions [were made] from the top without including parents and teachers."

Despite the difficulty, some schools are involving instructional faculty in the decision-making process, and there is reason to be optimistic that ECHSs will continue to look for ways to further engage teachers in decision-making activities. The three oldest ECHSs all reported having IHE and ECHS instructor representation on their governing boards. Furthermore, most of the interviewed teachers who voiced concern about a lack of involvement in school decisions were from ECHSs in their first year of operation. ECHSs can learn from the experience of one IHE representative, who said, "In the lessons learned column: Go out of your way to get the faculty involved and endorsing the project [from the beginning.] We've had to fight an uphill battle because we didn't have that."

Sustainability

> Most sampled ECHSs said that they will require at least the level of the initial grant funding to sustain their program once the grant runs out.

Sustainability continues to be one of the core concerns articulated by interviewed ECHS leaders and teachers. Similar to the intermediaries, school leaders have already begun to search for additional funds to prepare for the day when the foundation grant ends. As cited in the previous chapter, intermediaries described firm plans as well as a number of anxieties about ensuring school solvency. This section, however, will focus on school-level perspectives on sustainability.

Concerns about school solvency are shared by schools regardless of their age—that is, schools in their first, second, or third years of operation all expressed concerns. For school leaders at third-year schools, obtaining financial solvency was the only response when they were asked about issues of sustainability. A college leader captured the precarious nature of the funding situation: "Financial support of this program long-term is something that we're going to have to continue to work with. Our state budget is actually cutting support for both K-12 and postsecondary because of the economy. So those are concerns that need to continue to be addressed." Another college leader expressed this as something that should concern the wider college administration: "I'm not sure how we will continue this. I don't know if we will expand it. If the ECHS funds run out, the President [of the community college] will be forced to address this." A school leader in one second-year ECHS expressed his confidence in the program, yet tempered this confidence by acknowledging that funding is scarce. Similar sentiments were held by leaders from sampled ECHSs in their first year of operation. A college leader commented on how he had to restructure program finances to adjust for tight financial reality. When asked what it would take to sustain

the ECHS, he joked: "Large sums of cash!" He went on to comment, "My argument from the start is that we need to get more money. We don't have enough money to run this program. I've used some grant money that was technically designated to help me."

While financial concerns continue to dominate, interviewed ECHS staff also mentioned other means of supporting the sustainability of their schools. These included issues of effective leadership within the partnership and state education legislation. In some cases, these issues were tied in with larger concerns over funding; in other instances, they stood on their own.

Chapter Summary

Each ECHS has a unique environment and set of tensions and relationships within which it has to operate to most effectively break new ground in constructing (or adapting to) an ECHS. Some of the parameters affecting the structure and nature of each ECHS include the relationships between the ECHS and various partners, shared decision-making between partners and teaching staff (including academic planning decisions), financial and material resources (including concerns about sustainability), staffing capacity, and professional community and development. Following is a summary of some of the findings from this chapter.

- A strong relationship with a shared power-balance between the ECHS and its IHE is important to the overall success of ECHSs. For long-standing partnerships, the quality of relations between ECHS and IHE participants can be influenced by the previous relationships (e.g., the equality of partner leadership and the degree of college faculty support).

- Beyond the IHE, other partners such as governing or advisory boards often play a role in developing ECHSs. The most common constituency groups on the boards were ECHS and college administrators, ECHS instructors, and district representatives. Although most partners at sampled ECHSs agreed on the vision of each ECHS, there was sometimes tension concerning how to implement the vision.

- Districts play a key role in the success of many ECHSs, acting as funders, service providers, policy advisors, or merely the local context. Districts served as active and vital supports in some cases and as barriers in others at the sampled ECHS sites.

- Qualified and appropriate staff members are at the heart of any successful school, and ECHSs are no different. For some ECHSs, being able to find instructors who could teach college-level courses, assist with administration or activity-planning, as well as take on the new roles of advisor for students was a challenge.

- Some of the sampled first-year ECHSs, with small enrollments, struggled with only the support of a part-time (and sometimes, off-site) administrator.

- Teachers often relied on their professional community for support. Common planning time was frequently noted by teachers at sampled ECHSs either for its usefulness (when present) or its necessity (when absent). Although collaboration among ECHS and IHE instructors occurred at some ECHSs, at others the collaboration was hindered by obstacles such as time constraints or disparity in the perceived value of the relationship.

- The financial outlook for ECHSs will need to be followed closely, especially in terms of sustainability of the programs. Funding drives decisions on staffing, materials (such as textbooks for the students), transportation, and programs available to students. At some of the ECHSs the dollar amount for purchasing textbooks was not adequate and funds needed to be raised to supplement these costs. School leaders at many ECHSs had already begun to search for additional funds to prepare for when the foundation grant ends.

CHAPTER IV: A Closer Look at the High Schools Side of ECHSs

As the earlier chapters of this report have indicated, to create successful and sustainable schools that meet the foundation's Core Principles, ECHS partners must balance a complex interaction of academic, interpersonal, and local contextual factors (including logistics, policies, politics, financing, and governance). This chapter steps inside ECHSs to examine how these schools are evolving, and what successes and challenges they are facing. Specifically addressed are issues related to the high school side of ECHSs: who they recruited and enrolled, how they fostered relationships and established a culture of high expectations for all students, and how they are instructing their students. Finally, this chapter includes a preliminary discussion of a variety of student outcomes that provide an intermediate measure of schools' success.

Recruitment

Enrolling a population of students underserved in postsecondary education is a primary goal of the ECHSI. The ECHSI target population includes, as defined by the foundation, "…students who have not had access to the academic preparation needed to meet college readiness standards, students for whom the cost of college is prohibitive, students of color, and English language learners" (JFF, 2004). Some ECHSs, by design, targeted specific student populations, such as immigrants, Native Americans, or English language learners.

Most sampled ECHSs made great efforts to attract and enroll the targeted populations. ECHSs employed recruitment strategies similar to those noted in previous years, including local media advertising, mailings, counselor referrals, and school fairs. Middle school recruitment was common, with ECHSs striving to get the name and purpose of their schools in the minds of future students.

In 2004-05, more sampled ECHSs noted that they were having success with word-of-mouth advertising. In fact, some ECHSs were finding that their students were their best advertisers because, as one ECHS leader noted, "With this group, they only trust each other." With students recruiting new students, one ECHS leader asserted that they would "never be short of numbers." As one intermediary representative speculated, this method of recruitment may gain in prominence "as [Early College High] schools become popular and parents understand what their kids can get."

Selection Criteria

After getting the word out and receiving applications, ECHSs have the challenge of deciding which students to accept for enrollment. 2004-05 survey results and qualitative data collection reveal that ECHSs employ a variety of selection criteria. Across the initiative, 89 percent (n=45) of ECHSs reported the use of at least one explicit selection criterion, and most used multiple criteria.

> One-third of ECHSs had explicit minimum achievement requirements for entrance. A few had maximum achievement cutoffs.

Although ECHSs aim to work with challenging populations, and some target specific underserved groups, many ECHSs maintain some minimum criteria for student entrance. As an ECHS leader said,

ECHSs "need to have a criterion because not all students are ready." About one-third of responding ECHSs (n=43) required students to have reached a minimum level of proficiency based on assessments. Minimum GPA requirements were reported in fewer than 10 percent of ECHSs in 2004-05. Of those with reported GPA requirements, minimums ranged from 2.0 to 2.5 on a 4-point scale.

To ensure that they reach their goal of enrolling traditionally underserved populations, some ECHSs had maximum limits for students' previous performance as well (though these ECHSs were in the minority). Only two ECHSs had maximum assessment scores, one had a maximum based on class rank, and four set a maximum GPA when selecting students. Although few schools had these requirements, they could be controversial. A teacher at an ECHS with a maximum based on class rank felt it was unfair that "a poor, minority kid who happens to be in the top 10 percent, but otherwise doesn't have any of the supports to help him get to college, be denied entry."

Although not necessarily used to judge students' literacy skills, about one-half of all responding ECHSs (n=43) require students to write essays. Schools usually ask students to write about why they are interested in the ECHS, but some sites just require a writing sample, and others require students to complete a short written piece during the interview process. In some ECHSs, these essays are used as an indicator of students' interest in the program or to place students in the appropriate writing class.

Many ECHSs are interested in getting a sense of students' motivation and social skills. About two-thirds of the responding ECHSs (n=44) used student interviews, where prospective students met with staff at the ECHS. These interviews allowed ECHSs to make sure that students understood the school's expectations and allowed staff to make decisions about students' readiness for the school. At some ECHSs, only certain students are asked to interview, while at other ECHSs, all students are required to interview. Parent interviews were also fairly common, with 54 percent of responding ECHSs (n=43) requiring parents or guardians to meet with ECHS staff. Some parent interviews were more formal than others. The ECHS leader at one school had the counselor interview all prospective students' families to ensure "a level of commitment on the part of the students and the parents." One or more recommendations were required at 48 percent of the responding sites (n=44), with most ECHSs requiring at least one recommendation from a counselor or other faculty member familiar with the student. Nearly half of the responding schools (n=44) had other student selection considerations, including students' attendance history, first generation college attendance, and language background.

> For ECHSs that rely exclusively on lotteries, future success of the program may make it more challenging for ECHSs to continue to serve the targeted population.

Many of the ECHS (76 percent, n=42) were in the fortunate position of having more qualified applicants than spaces available. Sixteen percent of these schools did not have selection criteria and used a lottery to decide which applicants would be accepted. One-quarter of ECHSs (26 percent) used their selection criteria to build a list of qualified applicants and then used random selection to choose among the qualified candidates. Charter schools were more likely to use random selection than other schools, with 57 percent of charters (n=14) using random selection compared to 33 percent of non-charter ECHSs (n=30). An interesting selection process occurred at one school that accepted every qualified, but low achieving applicant and then used a lottery to accept gifted students to fill the remaining seats.

Acceptance Rates

The average ECHS acceptance rate in 2004-05 for all ECHSs providing data was 69 percent. Acceptance rates differed by several ECHS characteristics. First, the average acceptance rate at charter schools was 75 percent (n=13), the average rate at non-charter schools was 66 percent (n=29). Second, the average acceptance rate for schools drawing students from only one district (65 percent, n=19) was lower than those accepting students from multiple school districts (74 percent, n=23). These gaps in acceptance rates are similar because charter schools were more likely to pull students from multiple districts.

Sixteen ECHSs provided acceptance rates for two consecutive years. The change over time showed a great deal of variability; but, in general, more of these sites had lower acceptance rates in 2004-05 compared with 2003-04. This pattern has already been noted in a broader charter school evaluation where the combination of a good local reputation and a sibling preference policy made admission competitive even when it was not selective (Finnigan et al., 2004).

Characteristics of Enrolled Students

The range of selection strategies described above reinforces the notion that ECHSs developed a variety of definitions concerning which students are most "at risk" and should, therefore, be enrolled. Following are some descriptions of the types of students who are enrolled in ECHSs.

Demographic Characteristics

To see whether ECHSs are enrolling the targeted student populations, Exhibit 6 compares the composition of ECHSs in 2004-05 for various student characteristics with the composition at the other schools in their feeder districts. ECHSs enrolled a student population that had a higher percentage of minority students (73 percent) compared with its feeder districts (67 percent),[11] but had lower percentages of students from low-income families, students receiving special education services, and students who are not fluent English-speakers. On average, 33 percent of students were of Hispanic background, 29 percent were identified as Black, 7 percent as Native American, 5 percent as Asian or Pacific Islander, and 2 percent were identified as having mixed background or coming from other racial or ethnic groups. Students at ECHSs were slightly less likely to be poor (56 percent) than their counterparts in the feeder districts (59 percent), as measured by the percentage who qualified for the free or reduced-price lunch program (FRP).

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[11] The minority category includes Hispanic, Black, Native American, Asian, other or mixed ethnicity students.

Exhibit 6: Average Percentage of Students in Various Demographic Subgroups, 2004-05
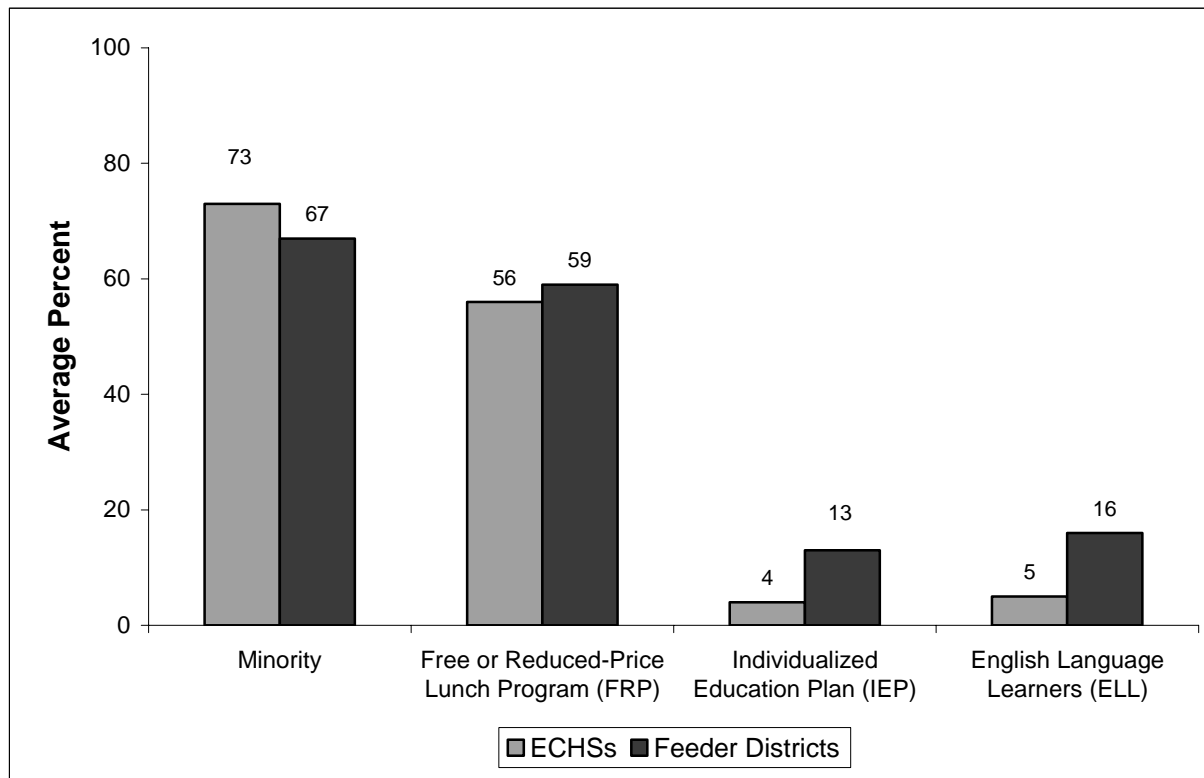
Ns: Minority: n=43; FRP: n=33; IEP: n=29; ELL: n=37.
NOTE: Feeder districts average percentages are weighted by the percentage of students coming from each of the feeder districts. For example, if an ECHS pulled 40 percent of its students from one district and 60 percent from another, the percentage of Hispanic students from the feeder districts was calculated as (% in D1)*.4 + (% in D2)*.6. Only sites with data for both the ECHS and the feeder districts are included in this figure. The average percentages for all 45 reporting ECHSs are Minority: 75%; FRP: 59%; IEP: 4%; ELL: 6%.

> ECHSs generally had success in recruiting minority students and students from low-income families, but had low enrollments for ELL and students with IEPs.

Only 4 percent of students had individualized education plans (IEPs), compared with 13 percent in the feeder districts, and only 5 percent of students were identified as English language learners (ELL), compared with 16 percent of students in feeder districts.[12] These differences are not surprising given the findings from the High School Grants Evaluation (AIR/SRI, 2006). In the 10 districts studied, start-up high schools (the type of school most comparable to ECHSs) had higher percentages of minority and low-income students, but lower percentages of ELL and students with IEPs when compared with the feeder districts. One explanation for why these students were underrepresented in ECHSs may be because ECHS staff were concerned that these students would not be up to the challenges of the rigorous ECHS

[12] Of the demographic characteristics listed, the percentage of ELL enrolled had the most variability across the initiative. Although most ECHSs reported less than 10 percent ELL, two ECHSs reported ELL enrollments of over 60 percent.

curriculum. A guidance counselor said that "asking [students with IEPs] to turn around and go into a class and have an SAT score ready a year from now" was not "a realistic expectation."

Academic Skills

A common concern expressed by sampled ECHSs in 2004-05 was the lack of screening for academic skills before admitting students. Many admitted students struggled with the rigorous coursework. As one leader lamented, "You can't make up for five years of school in one year." ECHS staff noted that many students' skills in the two bedrock areas, literacy and mathematics, were poor enough to be a major barrier. To further complicate this problem, many interviewed ECHS teachers remarked that the ability levels of students varied widely. One teacher noted the great challenge of working with students whose abilities "[run] the gamut from kids who are barely literate in English to kids who are doing college-level work."

Many sampled schools admitted students who lacked the skill level or motivation to succeed in the program. In the future, some ECHSs are considering raising entrance standards, employing a more comprehensive screening process, or administering placement tests.

Many ECHSs described plans to assess student preparation to a greater degree in the future. As one school leader pointed out, "If students don't come with the appropriate academic skills, our faculty is not prepared to teach remedial skills." One ECHS plans to raise the standards for entrance so that students are at most two years behind grade level in reading (and preferably at grade level). Other ECHSs, rather than raising entrance requirements, plan to administer placement tests. One teacher described the focus his school would have on "diagnosing students at the beginning of the year" rather than in the middle of the year, as had been done in the past.

Social Skills

Interviewed ECHS representatives also described challenges with the students' social preparation for the program. At one school, the leader reported that many, if not most of the incoming students "had intense social issues that they were dealing with." One instructor commented on what he thought would prevent many students from succeeding: "…It's all about motivation." Students even remarked on their peers' lack of motivation; one student said that some students "could care less. They just want to go because it's something to do in the summer or they get to go to the college campus."

As a result of these experiences with early classes, interviewed ECHS staff expressed a need to focus more on the motivation and emotional preparedness of incoming students. Several faculty indicated that the coursework and curriculum offered was irrelevant if students were not emotionally prepared to handle the challenges. Next year, for example, one ECHS will continue to seek out underserved students, but will pay closer attention to students' prior records including tardiness, attendance, and completion of assignments on time.

Middle School Outreach

A key strategy to improving the academic and social preparation of students is to take steps to prepare potential ECHS students before they arrive in the program. An intermediary

representative explained, "[The ECHSI]'s going to be much more effective in 9 through 12 if you have a solid 6 through 8 foundation." In 2003-04, most ECHSs had only engaged in middle school recruitment activities, with little focus on preparation of future students. A few ECHSs took students from partnering middle schools, and they felt that these students were adequately prepared.

In 2004-05, more sampled sites discussed current or planned bridge programs than in previous years. The goal of a bridge program is to ensure that potential students at area middle schools will be more adequately prepared for ECHSs, both academically and behaviorally. One ECHS, an early adopter of this approach, started planning programs for students in several area middle schools before the ECHS even opened. One ECHS (as noted in the text box) plans to implement a summer program for area middle school students. Another ECHS had made provisions for college faculty to provide programming to prospective students in the summer following 7th grade, which would continue through 8th grade. Several other ECHSs noted that they would like to add such programming, but had no specific plans to do so.

Another way for ECHSs to reach many students is through improving the instructional skills of area middle school teachers. So far, no sampled ECHSs had implemented any professional development for middle school teachers unless the ECHS and middle school were already partnered. For example, one charter ECHS with a partner middle school on the same campus brought middle school instructors to a literacy professional development conference.

Example of a Bridge Program

To prepare middle school students for the ECHS, one school planned to start a pre-ECHS program on Saturdays and during the summer. According to the principal, the plan is for this program to be structured like "a camp model where [students] take core subjects in the morning and then in the afternoon some form of enrichment, whether it is athletics or film club, or something like that." The goal of the program is to hone students' basic skills so that they will be prepared to take geometry in 9th grade. In addition, the program will be taught by high school teachers so that students are acclimated to high school expectations before 9th grade.

The most intensive form of middle school outreach is to actually integrate the middle school grades into the ECHS. For one intermediary, all of its affiliated ECHSs will include the middle and high school grades. No other intermediary has adopted this approach across all its schools, but at least one school leader noted that plans were underway to bring grades 6 though 8 into the ECHS.

After just two years of experience (and only one year for many ECHSs), it is clear that the skills of incoming students are too important to ignore. If current trends hold, future data will show ECHSs honing in on the appropriate balance of entrance requirements and greater attention to the lower grades so that more middle school students will have a chance to master those requirements.

The New 3R's

ECHSs are starting to focus on student motivation and emotional readiness in their recruitment efforts so that the schools can more readily create a college-going culture in which all students are

expected to attend and complete college. To attain this outcome, ECHSs expect that their students will take enough college courses to receive two years of college credit and develop the skills necessary to continue for a four-year degree. As noted earlier, the foundation promotes "the new 3R's"—rigor, relevance, and relationships—as important contributors to the creation of a college-going culture and overall student success. This section addresses each of these features.

Relationships

Strong student-teacher relationships develop in effective schools and are evidenced both in the larger school context and within the classroom: high expectations for all students, respect and responsibility, and personalization. Relationships based on these attributes should promote a college-going culture.

High expectations

As part of ECHSs, staff should expect all students to enroll in and pass college-level courses. Yet the sampled ECHSs continued to struggle with maintaining uniform expectations for college-credit accumulation, especially in light of the varying skill levels of the populations they serve. Inherent in the design of ECHSs is a tension between the target population of underserved students and the vision for all students to earn two years of college credit. Both last year and this year, some interviewed teachers were skeptical of the possibility of enrolling students with weak academic skills in college courses and of the eventual likelihood that those students could earn two years of college credit. Although two year of college credit remains a goal for ECHSs, most staff reported that it may not be possible for every student. As one teacher pointed out, "I think we have to be careful saying 60 is a goal for all of the students. To me that just doesn't seem reasonable because not all students are on that level yet. Sixty should be a goal but maybe not for every student."

One of the perceived challenges to high expectations in the classroom is students' incoming skill levels. Some interviewed teachers struggled with maintaining high expectations when faced with a variety of student skill levels. One teacher reported:

> *The biggest problem has been keeping that rigor, but if you have 65 percent of the class missing out on key skills, even though these are pre-AP students, you can't tell them to figure out material on their own. Yet you had three or four students that catch info and move on. The question becomes, how do I keep these three students engaged and challenged when you need to work with the rest, and still keep the rigor up for all?*

Some teachers struggled with maintaining high expectations in the classroom for all students given the variety of student skill levels. Students complained that teachers either taught down to the lowest-skilled students or taught above their level.

Some teachers find it difficult to balance high expectations with meeting students where they are. Interviewed students reported that in the teachers' quest for higher-level work, students sometimes missed the basics. At one ECHS, students felt that the mathematics teacher was moving too quickly in his pursuit of higher-level work and that the students might need a slower pace in order to grasp the material. One student said, "Math would be better if we went over the same stuff for a little longer." Students said that the teacher believed that

because the students were in an ECHS, they were supposed to "get it." Students also reported that the teacher frequently reminded them that they were in the program with the goal of going to college. Data also revealed that some teachers were trying to reach all students by lowering the expectations for all. One student reported, "The teachers are pushing us, but there are students that are not getting it so teachers have to slow down to help the students who don't get it….so it is slowing it down a little bit. We are not as far as we could be. They're helping the kids who need the extra help and who haven't been in the program."

<u>Respect and responsibility</u>

> Due to student behavior and maturity, sampled schools enforced rules to teach students responsibility. More established schools developed progressive rules in which students received more freedom as they demonstrated success in the program.

The relationships between teachers and students and the way students are treated, specifically how much respect and responsibility they are given, play a role in how students feel about and ultimately perform in school. A Payne and Kaba study (2001) found, "Social trust is the key factor associated with improving schools." The top schools in that study had an atmosphere of respect and open communication, while the low performing schools did not. Establishing an overall climate of respect and responsibility is important to the college-going culture of the school, as students must be prepared to take responsibility for their own learning and behavior at the college level. Although sampled ECHSs recognized the importance of respect and responsibility for students, they experienced a tension between creating a school-wide climate of respect and responsibility and the realities of the behavior and maturity levels of the student population. Because many ECHSs struggled with the maturity level of enrolled students, some schools implemented strict rules with consequences to teach students responsibility.

Sampled new schools this year reported that more discipline structures were in place than last year's sampled new schools. This increase in formal discipline is likely related to prior experiences, networking with last years' schools, or intermediaries' suggestions. Schools found that because of student behavior, staff needed to enforce rules to teach students responsibility by taking some freedom away. One teacher reported that there were only certain students she could trust with certain responsibilities: "We have computers around the campus, but we can't trust all the kids to go and use them on their own. We know who we can and can't trust with that kind of freedom."

In some sampled schools, the expectations differed by grade level rather than by individual. More established schools with multiple grades gradually gave students more responsibility and freedom as students progressed through the program. One teacher described how the timeline for taking college classes was designed around the grade and maturity of the students: "We try to wait for a little bit more maturity [before letting 9th graders take college classes] and I'm basing that on the experience we've had. We just think it is better in terms of maturity, the ability to interact better with other adults across the street." Several ECHSs worked predominantly with older students, and in those schools, students felt that teachers trusted them with more responsibility and they enjoyed that aspect of being in an ECHS. One student reported, "Teachers don't hassle you about things. They know it is your responsibility to get it done." However, many of the visited schools only served 9th grade students and were dealing with how much freedom the students could reasonably be given.

In more established sampled schools where the positive climate was more entrenched and strong relationships had been formed, students reported that teachers had respect for them as individuals and for their future, which impacted their engagement with their education. According to one student, "These teachers care about me. It makes you think, if they care about you, why don't you care about your education? It makes you want to care, too. They want to talk to you about it." Students have in turn shown respect for their teachers. One teacher reported, "Students have my phone number and it hasn't been abused. I have been impressed. It is usually something major [if they call]." From student interviews, it was clear that students felt the difference in the ECHS environment compared with their previous school experiences. One student reported, "When I went to summer school at the local high school, the teachers were treating me with no respect. Teachers at other high schools judge you—not here." Strong student-teacher relationships, where there was mutual respect and students were trusted with increased responsibility, seemed to encourage students to care more about their learning.

In addition to relationships of mutual respect between teachers and students, most sampled schools have established a climate in which students respect each other, making the general climate more conducive to learning. Interviewed ECHS students almost universally reported that the relationships between students were very positive. Although small school size could lead to tension because the students are around each other all the time, students in focus groups all said that there was less fighting between students at ECHSs than at other schools they have attended. Both students and teachers credited the small school and class size with promoting strong relationships and feelings of student respect, equality, and closeness. As one student explained, "In big schools, there is peer pressure, popularity and all…Kids can have low self-esteem. At this school everyone is equal." Students felt more comfortable with other students who were sharing in the same experiences. This comfort encouraged attendance and participation. As one student said, "We are all here for the same reason, so we don't have to feel stupid to raise your hand because everyone has the same questions. Here you understand why you're here and what you have to do." However, at some sites, ECHS students felt that high school students not in the ECHS program had a negative view of ECHS students, and in some cases wanted to fight them. Students in the ECHS thought this animosity stemmed from jealousy of other high school students who wished they were in the ECHS.

<u>Personalized relationships</u>

ECHSs are setting the climate for personalized student experiences in which the teachers know their students well and advocate for their future success. One of the first aspects of climate noted by interviewed ECHS staff and students was the more personalized environment compared with other schools. This year's findings were similar to 2003-04 when it was reported that the small size allowed teachers and students to know each other better and led to more personal attention and instruction. Classroom observations and student and teacher reports consistently indicated that the small school and class size helped facilitate personalization. Some schools also offered classes such as advisories, which seemed to foster personalization. One school leader reported, "There's this bond that they—in the truest sense of what early college is—the bond that they're passionate, that you really get to know your teachers, you really get to know your students. I had a young man tell me 'You're the first person I could really just talk to.' I haven't changed, but it's just this setting can afford a different opportunity to really get to know the people who are there for him."

However, this personalization was not experienced in every school. For example, reports from both teachers and students at one school located on a college campus indicated that they are not very close. Students felt the teachers did not give them enough one-on-one attention. The guidance counselor reported being too busy with paperwork and disciplinary issues to make connections, and teachers said their schedules made it difficult to get to know students. One teacher said, "One of the things that is a result of our schedule is that we don't have relationships with our students. We have a focus group for half an hour twice a week, but that isn't enough. …I don't have enough time with them to get to know them, and I think that would really help the students." Although personal relationships had been difficult to establish at this school, the teachers recognized the importance of them to students' potential for success in school.

Across almost all sampled schools there was evidence of personalization within the classroom. Interviewed teachers reported that their close relationships with students enabled them to better know the instructional needs of individual students. One teacher reported that the most rewarding aspect of teaching at an ECHS "is getting to know the kids well. I know their academic levels, know their struggles. I know where they need help." Due to the level of attention teachers can provide to their students, they also have the opportunity to interact with parents. As one teacher said, "I know the students very well. I've met most of their parents. I do parent calls if they do well or if they have discipline or learning issues." Student focus groups also revealed how widely students believed they were experiencing more personalized instruction. One student commented, "If they know you as a person, it's easier for teachers to concentrate on how they are going to help you. I see that here. You can actually see them relate to you personally." Another student reported that one of her teachers "would go out of her way to make sure everyone is passing, put more grades in the grade book. Our teacher was really helpful and caring."

> General school-wide and classroom level personalization was positively reported by almost all respondents. However, there was little evidence of personalization of instruction in observed classes.

According to the foundation's definition of personalization, along with forming personal relationships within the classroom, teachers are expected to differentiate instruction to the personal needs of each student. Despite teacher reports that they know students' needs better in ECHSs, there was little evidence in observed classes to suggest that there was formal tailoring of instruction to students' needs, either of assignments or performance expectations. There were only two instances during classroom observations in which the teachers personalized the instruction. In one example, an academically advanced student was given a different assignment than the rest of the class.

Although sampled ECHSs have encountered some tensions in maintaining high expectations for all students and in entrusting students with certain responsibilities, there is an overall sense that the schools are promoting an environment of close student-teacher relationships in which students want to advance to college. Nearly every student in the focus groups reported attending college as one of their future goals.

College-going Culture

As noted last year, an important feature at some ECHSs in getting students to think of themselves as college students is their location on a college campus. One intermediary with a history of

serving underrepresented students has long promoted the "power of the site," asserting that locating high schools on a college campus motivates students and familiarizes them with college demands and experiences. Findings from 2004-05 show that a location on college campuses did indeed seem to influence the college-going culture in sampled ECHSs. Although all sampled ECHSs discussed college with their students, the nature of how college preparation and expectations are handled seemed to differ based on the location of the school. Reports from ECHS staff and students indicated that students at schools located on a college campus were treated more like college students, including being taught the same way as college students and following the college schedule. As one leader reported, the school mantra was "college student, college student." The school leader noted, "I think that had an impact on the way that the students started careers [here]. They were more in tune with what we expected; we set the bar high, increased expectations, and they will rise." One student reported that being treated like a college student makes students more responsible for themselves.

> All sampled schools demonstrated aspects of a college-going culture, but that culture appeared more pervasive at ECHSs located on college campuses.

In contrast, reports from staff and students at schools that have their own building or are programs within a larger school revealed that staff could only talk with students about the college-going experience (often based on their own memories) rather than treating them like college students. One teacher said, "Our goal is to get them to college, so I try to tell them what it will be like, you know the lectures, the notes. I am trying to give them some of the strategies that they can use when they get there like note-taking, how to do that. I try to give them some of the knowledge that I know that they will need." Hence, teachers at these schools prepare students for college instead of treating them like college students. Students at schools not located on college campuses discussed the merits of being able to travel to a college campus for classes. One student reported, "I like the experience. There is nothing better than to actually see what college life is like ahead of time. I am actually able to go over there and see what school is like, what classes and students are like and how they learn, and how it's different from high school." Although traveling to the campus is helpful to the students, it creates a different mentality for them—they are visitors to the campus rather than members of it, unlike students at ECHSs located on a college campus.

Evidence of Rigorous and Relevant High School Instruction

In evaluating instruction, one report from the evaluation of the High School Grants developed the following definitions (AIR/SRI, 2005c): Rigorous instruction requires students to (1) build upon existing knowledge and skills to create or explore new ideas; (2) demonstrate conceptual understanding of important content; (3) organize, interpret, evaluate, and synthesize information; (4) communicate clearly and well; and (5) revise work based on informative feedback. Note that this definition of rigor is about instruction; it does not cover the level of rigor in the content being taught. Relevant instruction requires students to (1) address questions or problems with real-world applications; (2) make choices about what they will study and how they will study it; and (3) take on plausible writing roles and submit their work to real audiences (p. 14).

This section takes a brief look inside ECHS classrooms. Ideally, an evaluation of rigor and relevance would include multiple sessions of data collection within many classrooms at many different ECHSs. The evaluation team analyzed classroom observation data from 14 English language arts classes, 11 mathematics classes, 8 science classes, and 7 history/social studies

classes across the visited ECHSs. Analyses of this small sample provides some examples of classroom assignments and instructional strategies that are consistent with the characteristics of rigor and relevance. In addition, survey, interview, and student focus group data were also used to triangulate the data, providing additional evidence of rigor and relevance in the classroom. However, the small sample size and single data collection point with each sample prevents drawing any definitive conclusions about the overall rigor and relevance of instruction and assignments in ECHSs.

Definition of "Rigorous" and "Relevant" Instruction

Rigorous instruction* requires students to
1. build upon existing knowledge and skills to create or explore new ideas;
2. demonstrate conceptual understanding of important content;
3. organize, interpret, evaluate, and synthesize information;
4. communicate clearly and well; and
5. revise work based on informative feedback.

Relevant instruction requires students to
1. address questions or problems with real-world applications;
2. make choices about what they will study and how they will study it; and
3. take on plausible writing roles and submit their work to real audiences.

* Note that this definition of rigor is about instruction; it does not cover the level of rigor in the content being taught.

Rigor in High School Instruction

Survey results reveal that 98 percent of ECHSs reported emphasizing development of instructional strategies to promote active inquiry, and 100 percent of ECHSs reported emphasizing instructional strategies to promote in-depth learning (n=45). Instructional strategies that promote active inquiry and in-depth learning are consistent with rigorous instruction because they usually require students to demonstrate conceptual understanding and to organize, interpret, evaluate, and synthesize information. When asked what instruction should look like at an ECHS, a high school leader said that the ECHS courses are driven by inquiry and discourse. In speaking about high school instruction, a college leader said, "For 9th grade, good instruction involves interactive instruction that is inquiry-based. I think that is really important."

> Many interviewed staff reported using rigorous instructional strategies. However, there was little evidence of these methods in the observed classrooms.

Despite survey results and reports by school leaders, analysis of classroom observation data suggests many classroom activities did not have the features of rigorous instruction. In many cases, students were not expected to create or explore new ideas, demonstrate conceptual understanding, think deeply about information, communicate clearly or well, or revise work based on informative feedback. In addition, the variation seen in instruction did not seem to differ by school or based on the school leader's stated instructional goals.

<u>English Language Arts (ELA)</u>

The evaluation team found that characteristics of rigorous learning opportunities were most common in English language arts (ELA) classes across sampled ECHSs. The evaluation team analyzed classroom observation data from 14 English classes across 13 ECHSs and identified examples of assignments and instructional activities that were consistent with various characteristics of rigor.

In many ELA classes, students were asked to compare and contrast different pieces of literature or poetry. Student and teacher reports confirmed that there were elements of rigor evident in ELA classrooms. A student remarked that the English teacher taught the students to read between the lines, implying that the students had to demonstrate their understanding of the text and interpret what they had read. A teacher commented that students should be able to not only memorize Shakespeare and be able to articulate it, but that students should also have to extract morals and themes. He said, "So in each piece we did, they had to analyze for themselves what the morals and themes were and articulate that, and for every single piece they had to write an essay." Consistent with the concept of rigor, students were expected to be able to clearly express their interpretations of Shakespeare and demonstrate their understanding of the literature instead of simply restating themes or memorizing passages. Another teacher explicitly stated, "The rigor has helped. It's heavy on essays and how to write. They're becoming prepared."

Rigor in English Language Arts Classes: Two Examples

In one classroom, students read a challenging book selection and then worked in groups to write a six-question test using Bloom's Taxonomy.* The teacher said to the class, "At your level of the game, I think it's important for you to think about how you think." She told students to write a test question at each level of the taxonomy and to make the questions "as hard as possible" because it is "not what you remember, it's what you can do." The teacher required students to go beyond basic memorization or recall. One student read a piece of text and then suggested to her group, "For analysis, why did the prisoners keep working when there weren't guards near them?" This task required students to demonstrate conceptual understanding of the book and of Bloom's taxonomy. By virtue of using Bloom's Taxonomy as a framework, students were required to organize, interpret, evaluate, and synthesize information.

In a 9th grade class, students had to choose quotes from the poem, "The Pied Piper of Hamlin" and the play, *Death of a Salesman* that showed a thematic connection between the two works. Students were then asked to interpret their quotes. A student explained to her group that in the poem, "the mayor is looking for the piped piper because he has disappeared. This is similar to Linda in *Death of a Salesman* in that Willy sometimes disappears into fantasy and that she tries to get him back." In this example, students were required to not only demonstrate their understanding of both texts, but they also had to evaluate, synthesize, and interpret information. Students were also called on to explore new ideas as they developed their interpretations of their quotes. Students were forced to go beyond basic summarization of plot points and to construct their own meaning for the text.

* Bloom's Taxonomy identifies six levels within the cognitive domain, from the simple recall or recognition of facts, as the lowest level, through increasingly more complex and abstract mental levels, to the highest order which is classified as evaluation. (Bloom's Taxonomy, n.d.)

<u>Mathematics</u>

Analysis of classroom observation data from 11 mathematics classes across 11 different ECHSs revealed that there were significantly fewer examples of classroom assignments and instructional activities consistent with characteristics of rigor than were observed in ELA courses. The vast majority of mathematics instruction emphasized student competency with basic computational procedures or memorization of simple mathematics facts. For example, in a 9th grade Algebra I class, the teacher began the lesson with two problems that she solved step-by-step on the overhead projector, with very little exchange between her and the class. Students were then instructed to work on a set of practice problems for the remaining class time. Students were not required to think or write about mathematics in challenging ways or demonstrate conceptual understanding of mathematical concepts.

> Sampled ECHSs evidenced more rigorous instruction in ELA courses than in mathematics courses.

It is not surprising to find so few examples of rigor in mathematics classrooms. In fact, the evaluation team's analysis of mathematics instruction based on classroom observation and interview data is consistent with the literature. For example, in Rigor, Relevance, and Results (AIR/SRI, 2005c), teachers reported that mathematics was the most difficult subject to teach well in a way that would be consistent with content standards and their school's instructional vision. Barriers to rigorous mathematics instruction include limited availability of useful instructional resources and professional development offerings, difficulty integrating math with other content, students' weak mathematics backgrounds, and the limited availability of qualified math teachers. Interview data confirms that ECHSs also wrestle with mathematics instruction. A school leader admitted that the math instructors were struggling to work with "difficult to structure populations." He also commented that the background of math instructors is a challenge for the school, implying that teachers need professional development opportunities to improve their instruction. Another school leader revealed, "Math is one of the most disjointed areas, and I don't think we did right by the students this year."

<u>Science and history/social studies</u>

The evaluation team analyzed data from eight science and seven history/social studies classroom observations in as many different ECHSs. There were fewer observations of science and history classrooms than there were of English and math classes, but there was also little evidence of the characteristics of rigorous instruction in these classrooms. The majority of the instruction in the science classes was lecture or test review. There was little evidence of students being asked to demonstrate their understanding of course content or construct new knowledge. For some schools, part of the struggle to incorporate elements of rigorous activities may be influenced by schools not having access to science labs. For example, at one ECHS, the Biology class met in a regular classroom with no lab equipment or sinks. In one Earth Science class, the majority of the class was a review and lecture on the planets and the moon, virtually free of any examples of rigorous instruction. However, during the teacher's interview, he explained that the observed class was part of a larger project; and that later in the project students would be able to teach each other and do presentations.

There were a few examples of rigorous instruction in history/social studies classes. An observation excerpted from a 9th grade Modern World History class exemplified characteristics of rigor.

Students worked in groups and had to develop a political advertisement based on pre-selected perspectives. Students talked among themselves about their poster. One group decided to use "Growth and Reform in China" for their poster title. The students referred to the textbook and one student said, "What do we want?" They started brainstorming. Another student said, "We want peace." And another student said, "We don't want big changes." The ideas they generated were: slow progress, not immediate reforms; modernization of China; and relying on ourselves, not foreigners to take care of our own affairs. Then the group wrote on the poster: "What we don't want." They started brainstorming ideas: We don't back Guangxu's abrupt reforms; reforms that gave the foreigners too many privileges; and Guangxu and his advisors. One student reminded the group that "we need to convince them to join us." They decided to put the following phrase at the bottom of the poster: "Help us put Guangxu in prison!! You don't want him controlling our tradition!"

The example illustrates students having to demonstrate their conceptual understanding of the historical context in which Guangxu's reign is situated in order to persuade others to agree with their decision to try and put Guangxu in prison. Students will have to communicate clearly and well and organize and synthesize information to successfully complete this assignment.

<u>Classroom assessments</u>

Assessments at the classroom level can reflect characteristics of rigorous classroom activities. Survey results show that few ECHSs, 38 percent (n=45), noted that performance-based assessments were a major emphasis. With such assessments, teachers and students can set clear learning and performance goals, and teachers can monitor and provide feedback to students on the quality of their work (AIR/SRI, 2003). Based on classroom observation data, the evaluation team found that there was a mix of performance-based assessments across schools and that the concept of performance-based assessment varied across the ECHS programs. Examples of performance-based assessment included student projects, oral presentations, group work, portfolios, and a mix of types of writing assignments. A high school leader reported, "We're moving towards performance-based. We are looking at performance-based instruction on the whole now, where each teacher will be responsible for more performance-based assessments, projects, at each discipline." In addition, several schools affiliated with one intermediary mentioned their push to establish more performance-based assessments.

<u>Standardized assessments</u>

> Teachers reported having to teach to the high school standardized tests, which they felt allowed little flexibility for rigorous instruction, did not cover rigorous content, and therefore, did not prepare students for college entrance or placement exams.

As discussed in the 2003-04 report, ECHS students must pass the same high school exit exams and end of course exams required of all students in their state or school district (AIR/SRI, 2005b). Based on the survey data, students at approximately 75 percent of ECHSs must pass a state mandated test in order to graduate, and 5 percent of ECHSs reported that similar requirements are currently under consideration (n=44). In schools with these high stakes exams, teachers reported having to teach to the exams to ensure that students passed. In those schools, exams drove the content in the high school classes, which did not always align with rigorous content.

Some teachers felt that because of mandated tests, there was little flexibility to use instructional strategies that were consistent with rigorous instruction. One teacher reported, "I think that this is more connected to the old way of teaching math because we really concentrated as a state on getting kids to be proficient. And part of that is being able to demonstrate your knowledge and being able to do that in words or pictures or whatever and they don't get that on the test." In other words, the need to prepare students for tests inhibited rigorous instruction. However, classroom observations showed that some teachers were able to construct rigorous learning opportunities while integrating mandated test preparation into classroom activities, but the mandates still drove the focus of the lesson. In another classroom, the teacher referenced the state test in teaching students how to answer different types of questions.

Although students were being prepared to pass high school exit exams, they found that they were not as well-prepared to pass college entrance tests. By teaching to the high school assessments, teachers were not addressing all of the content necessary for the college exams. As one intermediary put it, "Testing remains a major issue, the exit exams. The [high school] exit exam tests do not match the entrance exams in college…So there's a gap." Students also noted this disconnection. One student was concerned about the lack of rigor in his high school class and felt he was not prepared to pass the test required to enter the credit-bearing college math classes: "I don't think we were well prepared for the Accuplacer (a common test administered by community colleges)."

Relevance in High School Instruction

As part of the evaluation of the High School Grants, AIR/SRI developed the following definition: Relevant learning opportunities ask students to address questions or problems with real-world applications, make choices about what they will study and how they will study it, and take on plausible roles and submit their work to real audiences (AIR/SRI, 2005c). One way that ECHS teachers provide relevant learning opportunities is to allow students to make choices about what they will study and how they will study it. Examples ranged from students choosing which animal to research for a project in a Native Literature classroom, to a teacher allowing students to plan how they would present a scene from a play to the rest of the class. Examples of students making choices about their topic of study were particularly prevalent in English/language arts and history/social studies classes.

Another important characteristic of relevant learning opportunities is that students are able to make real-world connections. Overall, there were not many examples of this type of relevance in observation data, but a few examples did emerge from English, mathematics, and science classrooms:

- In an interesting example from a science class, students worked on a chemistry project that required them to compare the quality of the water in New York City's East River with that in Jamaica Bay. Students found lead in the East River water. When they compared it with data that was collected in the previous year, they discovered that no lead had been detected.
- In an English class, the teacher assigned students an independent project on consumerism. The teacher reported that the goal was for students to be of service to the community. One group of students developed a documentary on animal rights and another group of students fasted and abstained from drinking Coca Cola. Ultimately these students had to create a portfolio and teach a family member or friend what they learned. One student commented

about her particular project saying, "You learn about how buying a pair of shoes affects a young girl in a sweat shop in another country."

- With regard to mathematics, a school leader talked about how math might be integrated into real-life situations: "We did link up with two professors at [two IHEs with an NSF grant to help create secondary math modules where math might be integrated into real-life situations]. We have a few math teachers who are working on 'Extreme Home Building.' They're working on building a new home, measuring, students go to a new section of [the city] where they're building homes. Three teachers have agreed to develop more math modules over the summer for three weeks."

These examples show that the work that some students are doing can be made relevant to them personally and even to their whole community.

Another way that students had the opportunity to make real-world connections was through internships and service learning projects. A teacher reflected on one of his students who turned her personal interest into an internship with real-world applications. This student was a fan of the television drama, "CSI", and she decided to do research on how to become a medical examiner. As a result, she made contact with the city medical examiner and was able to set up an internship in the morgue of a local hospital. In another example, a college leader mentioned that high school students go out and make presentations in the community on various topics, depending on the focus of the organization for which they work.

High School Supports

As noted earlier in this report, many sampled ECHSs struggled with the preparedness of the target population for undertaking a rigorous curriculum. Several ECHSs found that they needed to provide additional supports, both academic and social, to ensure their students' success. Some of these supports are discussed below.

Courses

> While many ECHSs offer various support classes to students, ECHSs that have been open longer tended to have more formal courses in place to support student learning.

As Exhibit 7 indicates, ECHSs offered a variety of supports through courses. Over two-thirds of ECHSs (n=43) offered courses to assist students in developing their mathematics skills, and over one-half of ECHSs covered literacy skills in courses. Nearly 80 percent of ECHSs offered courses in more generic academic skills, such as note-taking. Finally, about one-half of ECHSs offered support courses to develop students' social skills. It is important to point out that these topic areas are not necessarily covered in distinct courses; several, if not all, topics may be covered in one course. Exhibit 7 also suggests that the longer an ECHS has been open, the more likely it is to have formal courses (either for credit or not) to support student learning outside of traditional high school courses. The largest differences are between schools opened in 2002-03 and those that opened in later years.[13]

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[13]   Of the three schools that opened as ECHSs in 2002-03, two are adaptation ECHSs. As adaptation ECHSs, these two schools had actually been open since before they joined the ECHSI. Therefore, one hypothesis might be that the development of student supports may take more than one or two years of operation. Furthermore, all three of these schools are affiliated with an intermediary that requires an extensive support system of all its ECHSs.

Exhibit 7: Percentage of ECHSs with Support Courses, by Content and by Year ECHS Opened, 2004-05
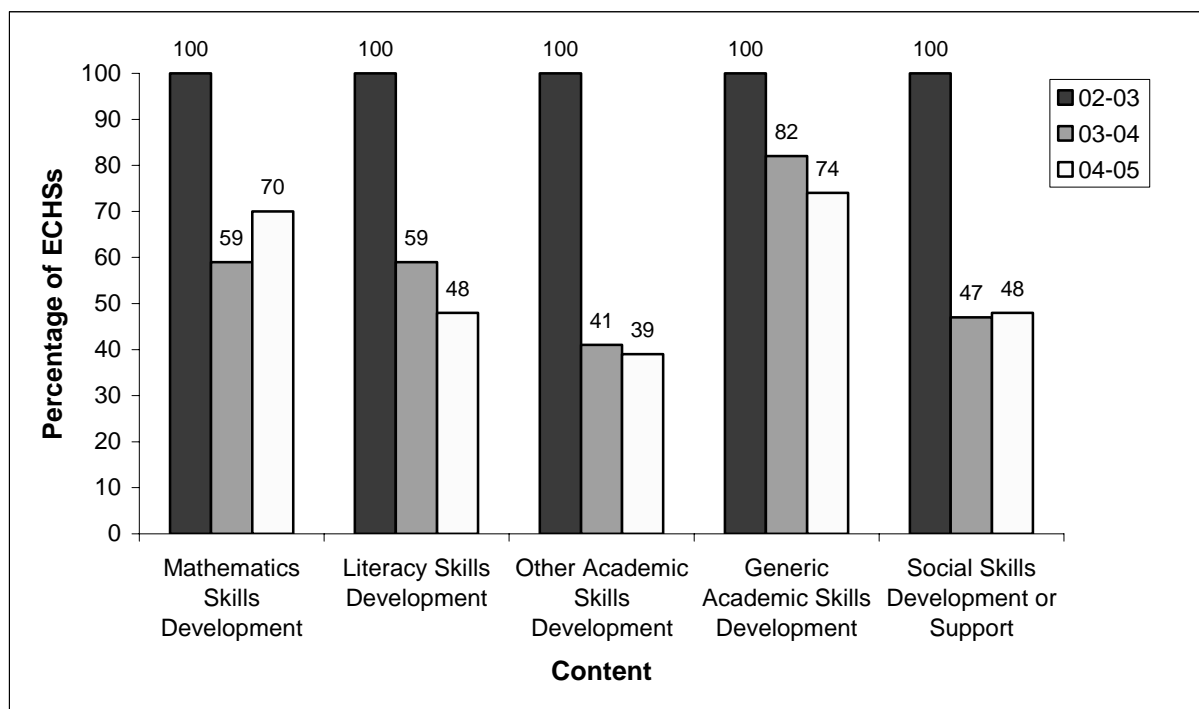
Note: n=43 (2002-03=3; 2003-04=17; 2004-05=23)

Tutoring

Of the many support activities offered, tutoring was overwhelmingly the most common. Nearly all ECHSs offered some type of tutoring support to students. Describing the centrality of tutoring at her school, one guidance counselor stated, "I've been really impressed with the tutoring here. We have a tutor out here to help kids and buses to take kids to tutoring on Saturdays. Those kinds of things have been really neat and I think the kids really appreciate them." In order to offer tutoring, however, there are logistical decisions to make. ECHSs most commonly offered tutoring after school (93 percent, n=43). The least common method was to offer evening tutoring (12 percent). Other times offered included: during school (81 percent), on weekends (30 percent), and over summer breaks (33 percent). Of course, as the percentages indicate, most ECHSs (91 percent) offered tutoring at more than one time. Interesting new findings this year highlighted some differences in the way schools integrate tutoring based on their location. ECHSs located on a college campus are more likely to offer tutoring before regular school hours, during the day, and over breaks, possibly because college schedules allowed for late starts, breaks in the day, and using open college facilities during high school breaks.

Quality of Support Activities

Evidence is emerging that not only do supports need to be offered, but they also need to be formalized and required.

While the survey provides a broad picture of the implementation of support services for students in high school classes, it gives little insight into the utility of the support services. In fact, there is evidence that ECHSs are struggling with how to structure support services to ensure that they are adequately used. Although many schools have tutoring programs, one of the main challenges continues to be getting students to use the available tutoring. One teacher captured these problems succinctly: "[Weekend tutoring] started good, but [attendance] is dwindling because it wasn't mandatory." Another teacher expressed similar frustrations in how tutoring is tagged onto a teacher's already busy day, but at the same time, not fully integrated into the academic organization of the school; the result is that students are often unable to take advantage of such supports.

Finding staff to cover support activities is another challenge. Many teachers expressed dissatisfaction that tutoring was expected, but not compensated. One teacher said, tutoring "has been on teachers' extra time. The kids have to seek us out. If they tell us they need us, we'll be here, but we're not always here, so they really have to seek us out." In some ECHSs, the staffing challenge was solved by bringing in external tutors and mentors, which presented its own set of challenges as far as finding quality tutors and using them effectively. One teacher noted, "There had been tutors. They were college students. They're supposed to be for science, but they would text on their phone, then [the principal] had to pay a teacher to monitor [the tutors]. We need a structure for tutoring, even if the students were tutors for each other." An ECHS leader mentioned a similar challenge in their tutoring program:

> *We have the tutoring, but I think we'll do that different next time. Our tutors are here just because they need volunteer hours, not because they necessarily want to be teachers. We need some education majors, people that have had some methods classes. I've sent out so many letters to parents, telling them their kids need to stay for tutoring. But they don't stay, and I don't really blame them because a lot of time, the tutors can't help. I think our kids need some advocates, people they can go to if they're having difficulty with teachers. I sent out two sets of letters requesting mentors. Of the 30 people that showed initial interest, I only got three that were committed. We lost one student who I felt we didn't provide all the support she needed to be successful. We were able to get her a mentor, but only for one week, and then she left.*

These data reveal that it is important for ECHSs to reflect on how to effectively integrate supports. In cases where supports have been effective (i.e., well attended and with high levels of teacher and student satisfaction), the support structures are integrated into the academic organization of the school. As discussed later in reference to college environments, supports become particularly effective when they are integrated with the school's design and made manageable for teachers and mandatory for students.

High School Outcomes

Although the ECHSI is relatively new, there are several ways to measure the early effects of enrolling students in an ECHS, including attendance rates, gauges of academic engagement and self-esteem, and a school's success in keeping students in school from year to year. As the initiative matures, more definitive measures of success, such as high school graduation rates and numbers of college credits earned, will come into play. Presently, due to the early stage of the initiative and the lack of comprehensive data, this section is a very brief first glimpse at some of these outcomes. In the future, as more schools have more students pass through their programs, more data regarding these outcomes will be available for analysis and discussion.

Attendance

> The mean average daily attendance for ECHSs was 91 percent. Schools that had below average attendance rates tended to be adaptation ECHSs or ECHS programs. New ECHSs tended to have higher attendance rates.

One of the first ways that ECHSs can demonstrate program success is by having high attendance rates. Based on survey data collected for the 2003-04 school year,[14] the average daily attendance (ADA) for the year was quite high. For the 22 ECHSs with data from that year, the mean ADA was 91 percent. As one teacher stated, "We do have some things that are going well. Our attendance is outstanding! We do have some kids that are problems, but even those kids have attendance that is good." It is helpful to compare this result with other schools to get a sense of how well ECHSs did with their attendance rates. Results from AIR/SRI's evaluation of the High School Grants provides comparison attendance data from 10 school districts implementing high school reform (AIR/SRI, 2006). The ADA rate for the start-up small high schools (foundation-funded high schools that are the most similar to ECHSs) was 91 percent. Both the start-ups and ECHSs had slightly higher ADA rates than the large comprehensive high schools in the High School Grants evaluation. However, not all ECHSs had such success with attendance. Seven ECHSs had ADA rates below 90 percent. Of these seven schools, six were existing high schools that added an ECHS program or adapted the whole school into an ECHS; one was a new startup ECHS.

Attendance data is also available for newer ECHSs based on the number of days students were absent in fall 2004.[15] As Exhibit 8 shows, most students were absent for fewer than five days. This finding provides further evidence of good attendance records for the ECHSs.
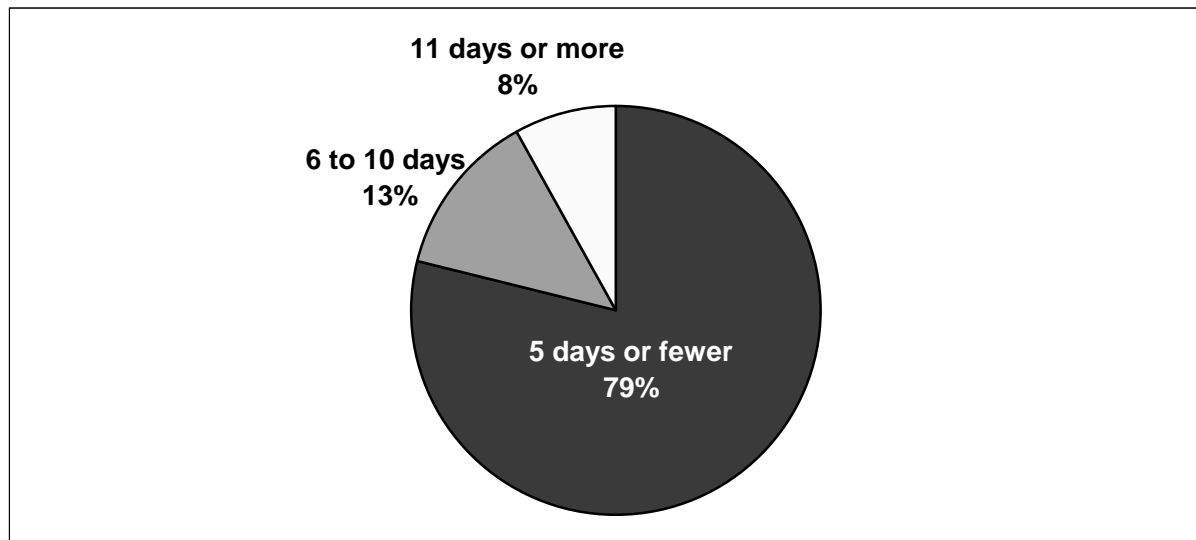
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[14] As the survey data were collected in spring 2005, the most recent full year of attendance data is from 2003-04.
[15] As the survey data were collected in spring 2005, all schools were able to provide percentages of students absent for various lengths of time during fall 2004.

Exhibit 8: Percentage Distribution of the Number of Days Students Were Absent in Fall 2004

Note: n=38

As reported in the 2003-04 ADA rate, fall 2004 attendance was lower at adaptation and program ECHSs (i.e., existing schools becoming ECHSs or adding ECHS programs) at 68 percent (n=18) compared with 88 percent (n=20) for startup ECHSs. The same pattern can be found in the High School Grants data, where the percentage of students missing five days or fewer in redesigned schools was lower (61 percent, n=7) than at start-up schools (67 percent, n=22).

Based on attendance data from the 2003-04 school year and fall 2004, it appears that overall there were lower attendance rates at adaptation and program ECHSs than at start-up schools. These lower attendance percentages could be due to several factors. First, some ECHS programs began at traditional comprehensive high schools because those schools were not very successful; therefore, these programs were started at schools that already had low attendance rates. In addition, some high schools were invited to join the initiative precisely because they were already working with challenging populations. These schools may have had lower attendance rates than schools working with higher achieving students. The start-up ECHSs may have had more motivated students applying to attend, or, with only one or two grades enrolled, may have had an increased ability to connect with and keep track of students. The high attendance averages for start-up schools may start to lower, however, as the schools expand to include more grades and there is less "new school" excitement.

Academic Engagement and Self-esteem

Another measure of success for the ECHS program is students' engagement with their education. Based on interview data collected during the 2003-04 and 2004-05 school years, it appears that the level of academic engagement among students was improving in the ECHSs. Teachers, guidance counselors, and ECHS leaders commented on the rise in students' engagement. For example, one staff member said, "It seems like [the students'] self-esteem has jumped up. You will see it immediately if you pull any kid out of class. You will see how they are very positive. They are not afraid to communicate with anyone. It's really amazing." This staff member

continued to explain that the students have begun to "see themselves as smart kids" and are competing against one another to make good grades. Faculty from another school also remarked on students' higher level of engagement and comfort. One staff member commented, "They are starting to learn to advocate for themselves, and that's something that a lot of them were intimidated by before they came to us."

On the other hand, some interviewed staff complained about the lack of academic engagement in some ECHS students. This lack of engagement showed in the lack of motivation, poor behavior, and absenteeism among students. A teacher at one ECHS described the immature behavior of some students and said, "This semester, [some issues in the classroom have been] behavioral in nature. They just want to talk with each other. In the past couple of weeks, I told them that I'm tired of competing with them." As noted earlier, ECHS staff reported finding the highest level of immaturity and behavior problems in the ninth grade. As one teacher explained, "The [ECHS] started with the ninth and tenth graders, and you can really tell that they are younger and more immature. At that age, they really are responsible for the more immature behavior at the school, because they are not adults yet." A staff member from another ECHS made a similar statement about the maturity of the younger students, and explained: "I think the students really do have a great desire to make this a different setting than their traditional high school. We're finding a tremendous awakening, [but] no matter how hard they try, they're still 16. The maturity factor is hard. There are students who act 24, but every third day, they act like they're 16. This makes a difference in their grades. We're trying to see what we can do to address the maturity issue." There appeared to be fewer complaints from ECHS staff and students about the lack of engagement and poor behavior with older students in the sampled ECHSs. This difference could be due to students maturing with age and time spent in the program (i.e., the impact of the ECHS); however, the difference could also be due to the most troublesome students leaving the ECHS.

Retention in the ECHS

In order to test the effectiveness of the ECHS concept, students will need to remain at the school for four or five years. Some ECHSs have already noted that retention rates could be problematic. At some schools, students have dropped out of the ECHS program due to a lack of engagement, attendance problems, poor academic skills, or challenging life events (such as a moving, job conflict, or pregnancy).

Retention with Students at High Risk for Leaving: Example from Gateway to College

Gateway to College (GTC) ECHSs expect that some students will leave the program because their schools target former drop-out students and students at risk for dropping out. GTC schools have an explicit process for a student's removal. If students fail to meet the school's standards, they are put on work contracts. These contracts specify the behavior students must exhibit to stay in the program. If students continue to fail to meet the standards, then they must leave the ECHS.

Although retention is not a problem unique to ECHSs, given their principles of working with challenging students and having high expectations for all, there is a particular tension at these schools about when students should leave the program. In other words, to what lengths should an ECHS go to ensure each student's success? Some sampled schools counseled students out of the ECHS. For example, one teacher stated, "We still have a few students who don't have the academic skills to be here. And we will be talking to their parents and encouraging them to find other places." A staff member from another ECHS explained, "If we lost [some students, it's] because they know what's expected and they choose not to work that hard. We're not going to feel that badly about it. We're not going to give students up casually. We're trying to find them work they are interested in. But if they're not going to give effort back, this might not be the right place for them." In most cases, it is currently unclear if many ECHSs had formal criteria for student retention.

Some sampled ECHSs tended to keep students, rather than counseling them out. One student from a focus group explained, "You don't hear about too many students dropping out. You hear about them not passing when they're supposed to pass, but they're still here trying to get it. Our teachers don't allow us to drop out. They tell us you're gonna pass even if it takes another year to do it."

Some of the sampled ECHSs seemed to be struggling with the challenge of deciding when underperforming students should leave the ECHSs. For example, this issue was the subject of a discussion among three ECHSs in a committee meeting during the 2004-05 school year. The ECHS leaders expressed the desire for more explicit parameters for when a student should be asked to leave the program. They discussed a plan of action for students who were failing multiple classes and did not appear to be trying to succeed in the ECHS program. One school leader explained at this meeting that the problem was those students who "want out of the program." This leader reported having students who were intentionally failing classes to get out of the program, and who were not participating in tutorials, parent conferences, or other school supports. In describing a similar dilemma, a guidance counselor at one of the ECHSs stated, "We now have students who need to leave the program because they are not fulfilling the obligations of the program…for example, grades, tutorial…but they don't want to leave the program. But, some need to." On the other hand, at this committee meeting, the school leaders also discussed at length how more tutoring programs and family liaisons could help keep students in the program. While the school leaders did not come to any formal conclusions on when students should be allowed to leave the program, the committee discussion was a good example of how some ECHSs are grappling with the issue.

Graduation Rates and College Credit Accrual

Ultimately, all ECHSs hope that high attendance rates, positive student engagement, and high retention rates will yield strong high school graduation rates, since it remains the goal of all ECHSs to have students receive a high school diploma. However, graduation data are not available yet for evaluation purposes. Since the first four ECHSs started in the 2002-03 school year, the first year that a group of students could have full exposure to a four-year program will be in 2005-06. Graduation data will be included in future reports.

Similarly, ECHS students—even students as young as ninth grade—are slowly accumulating college credits toward the initiative's ultimate goal of graduates who have earned two years'

worth of college credits or an Associate's degree. The evaluation team expects to be able to track and analyze college credit accrual once the Student Information System (SIS) is fully populated and as more students move through ECHS programs.

Chapter Summary

ECHSs have experienced both accomplishments and barriers in implementing various high school features. ECHSs have met the requirement of one of the initiative's core principles by recruiting and enrolling the target population of minority and low income students. However, some groups remain underrepresented in ECHSs (e.g., English language learners and students with individualized learning plans). Some sampled schools reported that the academic and behavior skills of the enrolled students have affected overall school and classroom operations and culture. These ECHSs reported that a number of their students lacked the academic skill level or motivation to succeed. As a result, some of the sampled schools are considering making some changes (e.g., in admissions, supports, rules, and retention policies) in response to how these students have performed in the ECHS thus far. Despite the various challenges faced by ECHSs, most schools have successfully created a college-going culture, as nearly every student interviewed reported plans to attend college after finishing at the ECHS. Following is a summary of some findings from this chapter.

- Because some targeted students may not have the necessary skill level to commence or complete the demanding curriculum, some ECHSs have imposed minimum achievement requirements for entrance. In the future, some sampled schools are considering raising entrance standards and altering admission policies through measures such as more comprehensive screening processes or placement tests. For currently enrolled students who are not succeeding in the program, some sampled schools are considering under what circumstances students should be counseled out of school.

- After two years of experience (and only one year for many ECHSs), ECHSs are realizing that middle school outreach is critical to improving the academic and social preparation of incoming students. This year, more sites discussed current or planned bridge programs than previous years, but it was still a low to non-existent priority for many sites. One intermediary requires that all of its ECHSs include the middle school grades to ensure students are adequately prepared for the demands of college classes. However, it seems that no ECHSs have provided any professional development for middle school teachers unless the ECHS and the middle school were already partnered.

- ECHSs serve students with a wide variety of skill levels, which can make it difficult for staff to maintain high expectations for all students. Interviewed teachers found it challenging to strike a balance in teaching with high expectations and meeting students at their levels. Some interviewed students reported that teachers often taught below their level or above their heads. However, the prevailing opinion from students was that their classes were challenging, but not too challenging.

- Across ECHSs, classroom observation and interview data indicated that teachers did attempt—to varying degrees—to use rigorous and relevant instructional strategies to prepare students for academic success in college. Some interviewed teachers felt that having to teach to high school standardized tests left little flexibility to employ rigorous

teaching methods and little time to prepare students for college entrance exams. Observed English/language arts classes exhibited more rigorous instruction than observed math courses.

- Schools that have been in existence longer tended to have more academic and social supports in place for students. The development of more sustained and required supports appears beneficial to help student success in the early college setting.

- Several sampled ECHSs struggled with creating a climate of respect and responsibility for all students due to the behavior and maturity levels of students. As a result, some ECHSs had to enforce stricter rules this year, particularly for younger students. More established schools have implemented progressive rules in which students earn more freedom as they demonstrate success in the program. Older students at these schools felt that teachers were respectful and provided them opportunities to take responsibility for their own learning.

- Students attending sampled ECHSs located on a college campus were more likely to report feeling like they were college students than students in ECHS programs not located on a college campus.

- Students and teachers felt they had closer and more personal relationships at ECHSs than at other schools. This personalization contributed to a climate in which students want to attend high school. Survey results indicated that the mean average daily attendance for all ECHSs was high.

CHAPTER V: A Closer Look at the College Side of ECHSs

The previous chapter detailed the many features of ECHSs that are similar to other small, reform-oriented high schools working with underserved students. This chapter switches the focus to the most unique aspect of ECHSs—the integration of college with high school. After noting the ways that ECHSs integrate the college component, this chapter provides examples of the foundation's new 3R's (rigorous instruction, a relevant curriculum, and meaningful relationships) in college courses, how ECHSs provide extra support for college courses, and some preliminary evidence of students' performance in college courses.

The ECHS Compresses the Years to a Postsecondary Degree

> In 2004-05, nearly all ECHSs arranged for at least some students to take college courses for credit.

One of the Core Principles of the ECHSI is to provide students with the ability to compress the years toward earning a postsecondary degree. Many ECHSs, despite their recent implementation, have already arranged for students to take college courses. About 90 percent (n=44) of ECHS leaders reported that at least some of their students took college courses for credit in 2004-05, and one-quarter of the leaders reported having students taking non-credit college courses (e.g., developmental courses and college transition courses). Only five schools did not have any students taking college courses for credit (four of which opened in 2004-05).

Availability of college courses generally depended on the grade level of students: the higher the grade level, the more likely students were taking college courses. Over half of ECHSs with 9th grade students (63 percent, n=35) arranged for at least some 9th grade students to take college courses for credit. The percentage goes up for each successive grade: 87 percent of ECHSs with 10th grade students had at least some 10th grade students in college courses for credit (n=32); 100 percent of ECHSs with 11th or 12th grade students had at least some of these students in courses for college credit (n=22, n=17, respectively).

Of course, just because some students took college courses for credit does not mean that all or even most students took college courses. For example, only 38 percent of schools with 9th grade students enrolled more than half of those students in credit-bearing college courses (see Exhibit 9). In fact, of the schools with upper-class students, less than half had them enrolled in credit-bearing college courses. Eventually, most ECHSs should have close to 100 percent of 12th grade students in these courses. But in 2004-05, many of the schools with 12th grade students were adaptation or program ECHS. None of the 12th grade students had the benefit of four years of the ECHS program.

Exhibit 9: Percentage of ECHSs with at Least Half of the Students in the Grade Taking College Courses for Credits, 2004-05
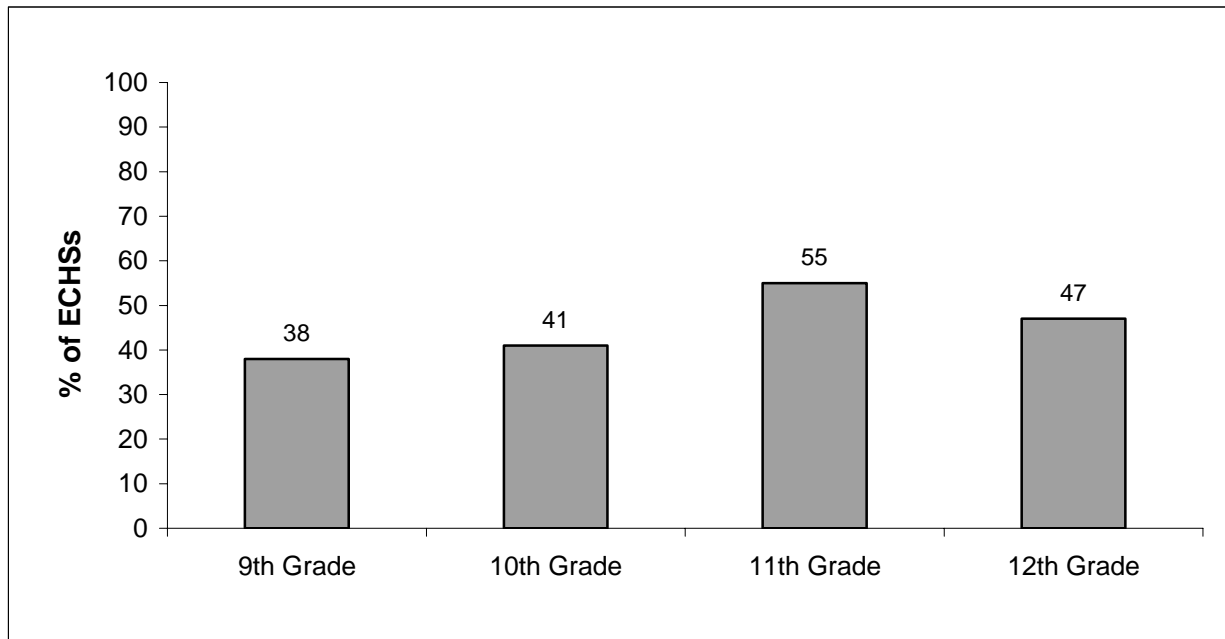
Note: ECHSs with 9th grade: n=35; 10th grade: n=32; 11th grade: n=22; 12th grade: n= 17

Course Sequence

As the numbers above suggest, there are a variety of strategies for compressing the years toward a postsecondary degree. This section discusses the varied long-term strategies by which ECHSs plan to offer students the opportunity to earn an Associate's degree or two years' worth of college credit and some of the difficulties associated with course sequencing.

Working with a student to plan his or her college course sequence is one of the more critical logistical concerns at the ECHSs. The excerpt from a classroom observation highlighted in the box provides one example of a teacher introducing her students to the careful planning needed when selecting college classes.

Course Sequence Counseling In Action

In Ms. Smith's college advisory class, she tells her students they will spend time talking about different career options and the courses they might need to get there. She stands at the front of the class with course guides and other administrative papers that detail the precise courses and sequence of courses students need to take at the ECHS. As the students pore over the course guide, Ms. Smith stands at the overhead and reviews the course guide on transparencies and highlights specific course requirements students all need in order to graduate with two year's worth of college credit.

Ms. Smith says, "Now flip this sheet over. On this other side it tells you the course work you need to finish so you can get 60 credits. Good news? This is the strength of Early College." She continues, "Now, you need a minimum of 60 credits of college work, 18 that have to be from one of these areas you see here on the sheet. How long does it take to get 60 credits? If you take an average of 15 credits a semester, that would be 2 years. In these 60 credits you need to have 18 in one of these groups here."

A young woman asks, "I want to be a dentist. So I know I need to get an AA in science. Can I do that here?" Ms. Smith responds, "You can. I'll talk to you about that in detail later, but good question. Now go up to the top of the page to the general education requirements. Remember in high school you had to have four years of English, three years of math? That's what general education is in college. Everybody needs to have three to five units of natural science. So look here—[pointing to the course guide]—you have all kinds of biology classes. Pick out ones that look interesting. You need six credits in social and behavioral sciences."

She stops and looks at the class with a grin before continuing: "But here's the great part. You're going to take [this history course] for graduation in the Early College program *and* for high school graduation. You take that class and you get credit here at the high school *and* at the college—so two birds with one stone. [An economics class] is equivalent to high school economics. Again, two birds with one stone. So you'll be taking care of your Associate's degree as well as your high school degree.

"Now then, look down to the health sciences requirement. For those who haven't had that in high school, [it will be] two birds with one stone with this one too. One strength of this program is that you're taking care of both your high school and AA degree. You're going to need two physical education classes, and you have lots of choices, like nutrition, CPR…" A male student asks, "How about weightlifting?" Ms. Smith looks back at him and says, "You need two activity classes; walking, swimming, aerobics, whatever. I've said this to you all before, but one of the reasons I'm going through all these courses with you is to get you excited about it and plant some seeds of interest. Hopefully, all these options will be an incentive for you. You know? You're not only finishing your high school degree but knocking out some of college. Any questions?"

As noted earlier, many school leaders and teachers suggested in interviews that it was an ambitious goal to provide high school students with two years' worth of college credit. For some, this was an issue of student academic preparation and motivation. Many ECHSs administered a battery of assessments in order to properly place students in appropriate college courses. As one ECHS leader suggested, they were finding out that these assessments revealed that many ECHS students were not academically prepared to begin college. The result, therefore, was the possibility of not earning as much college credit. This leader said, "I'm not sure [two years' worth of college credit] is very achievable. Students still have to test and meet the requirements of our courses. They aren't necessarily testing into college-level courses. So they have to take developmental courses before they can even get to the college level many times."

Developmental courses are typically non-credit bearing. Therefore, the time students spend in these courses delays accumulating credits. Another ECHS leader echoed these concerns that students do not have the skills to finish two years' worth of college credit:

> *I don't think 60 credits is a very realistic goal. We may have promised the undeliverable. Maybe we should be more modest in our claims. If the threshold for gaining college credits is sixth grade reading, and we let in students who don't even meet that criteria, it's almost counterintuitive. Compressing what they didn't get in elementary school, then thinking that they can pass high-stakes [state achievement] tests, plus an overlay of college credits—it's pretty counterintuitive for our students. Not that they can't learn the material, but how to organize their work, how to study? All those things need concentration and it's not realistic for a lot of our students.*

> Some sampled ECHSs have planned out a fully articulated secondary/ postsecondary course sequence for their students. Others do not yet have a formal plan.

At other schools, the critical issue is not students' lack of preparation, but the academic organization (i.e., developing a path for students to earn two years' worth of college credits). Providing courses for students can be highly burdensome for school leaders. Sampled schools demonstrated varying degrees of preparedness in the integration of college courses. Whereas some school leaders mentioned anxiety around delivering all of the college credits to students of different academic abilities, other schools used systematic curriculum mapping to alleviate much of that fear. Some schools collaborated with their IHE partners to develop detailed curriculum plans, mapping out a series (or various series) of courses students could take in pursuit of both a high school diploma and two years' worth of college credits. Typically coordinated by college representatives and ECHS guidance counselors, school leaders would plan out the course sequence, increasing the likelihood that their students would have the chance to earn two years' worth of credits. One college leader explained how they developed their course sequence: "What we did on this campus was establish a curriculum committee composed of college people and the principal guidance counselor of the [ECHS]. We met, drafted a 5-year plan, looking at the requirement for city schools and looking at our college requirements."

Many planning teams at sampled ECHSs focused on finding courses that would provide both high school and college credit. According to a college leader, "The college courses were selected by a team. It first started with the counselors. They looked over what high school and university classes can be counted for double credit. Then we brought in the faculty advisor team to look at, realistically, what could 11th and 12th graders expect to do well in?" Although dual-credit classes are the ideal solution, some ECHS had difficulty matching the course content between the college and high school curricula. One high school leader noted:

> *We sat down and had meetings with a department chair or dean from the college, and curriculum supervisors from [the district]. . . They felt our English curriculum did not have enough literature so we had to broker a deal because they wouldn't give [the college] English Lit credit. We also had to take into consideration the state [high school assessments] because there were a few units that we didn't cover in our classes [that the students need in order to pass the*

> *required tests] . . . That was one of the biggest challenges—working out the various requirements.*

Ultimately, the group resolved the problem by adding online tutorials to supplement the courses.

This collaboration around curriculum resulted in course sequence changes at some sampled schools. Curriculum teams discovered that if they moved courses around, students would be better prepared for standardized tests, and transitions into some of the college coursework would be less problematic. A guidance counselor spoke about how the ECHS had worked out a way to offer a college experience to even significantly under-prepared students:

> *I wondered how we were going to adapt the 60 credit hours for kids who were three or four grade levels behind, but we figured out a way. We looked at the catalogue and looked at developmental courses; we looked at the whole spectrum and developed a matrix that has courses for kids throughout the whole spectrum.*

At this school, it is likely that not all students will be able to earn two years' worth of college credits since developmental courses will not carry credit. Nevertheless, the school is committed to creating a college-going culture for all.

In some cases, ECHSs had less-than-clear plans and were instead approaching the issue of course sequence on a more ad hoc basis. This was not an ideal approach as it often led to both administrator anxiety and the possibility of not providing students and parents with what had been promised to them.

Provision of College Courses

In addition to the difficulties associated with course sequencing, offering students the ability to earn two years of college credit presented logistical challenges as well. In developing the capacity to deliver two years of credit to students, ECHSs must consider where students will take the courses and who will teach them. School leaders have a variety of instructional and practical decisions to make in solving these challenges. In considering instructional decisions, school leaders must bear in mind that while fully integrating ECHS students into college courses (i.e., having ECHS students take college courses on college campuses, with other college students, taught by college instructors) could increase academic motivation and maturity, it is plausible that such a scenario could be too much of a challenge and result in negative experiences for ECHS students (e.g., failing grades, lack of confidence). In considering practical decisions, ECHSs face challenges that traditional high schools often do not face, including challenges associated with transporting students, locating qualified instructors, and meshing different academic calendars (e.g., the school district's and the college's). Each of these decisions impacts the ECHS students' college experience.

<u>How do ECHS students take college courses?</u>

ECHSs have four choices for how college courses can be offered. First, ECHSs can offer college courses on a high school campus. Survey results in 2004-05 indicated that 40 percent of ECHSs planned to use this arrangement (n=45). Second, ECHSs can offer courses on a college campus in which only ECHS students are enrolled. Forty-two percent of ECHSs planned to use this arrangement. Third, ECHSs can arrange for cohorts (or groups) of ECHS students to enroll in

certain college courses with other college students on a college campus. In 2004-05, 69 percent of all ECHSs planned to use such a strategy. Fourth, individual ECHS students may be fully integrated into college courses with other college students: as three-quarters (76 percent) of ECHSs anticipate using this strategy, it is clearly popular.

While schools had these four choices when considering where students should complete college courses, many chose to use multiple strategies. In 2004-05, nearly three-quarters of the ECHSs planned to use multiple strategies. Many ECHSs located on college campuses planned to use the three strategies that require students to be on a college campus. In many cases, the variety of options was an issue of ability progression. For example, a school may start students on the high school campus. If students prove able to handle college courses and seem to thrive under their new expectations of college-level work, they may be increasingly integrated into the local IHE campus. As one school leader expressed:

> *We found it was very difficult to have 9th graders on a college campus. …We got normal 9th graders who were not ready to be there yet.….So, in the spring we kept them in some cohort classes and then we moved some students we felt were more ready into regular college classes, which was really our goal.*

Who teaches college courses?

Along with making decisions about where college courses are offered, school leaders must also determine the most appropriate instructor for the college-level courses. Most ECHSs planned to have at least some college courses taught by high school teachers (64 percent, n=45). For ECHSs located in a building with other high schools, 80 percent planned to use this strategy. However, all ECHSs, regardless of location, planned to offer college classes taught by college faculty. Again, there was not a single solution. The survey data revealed that most ECHS planned to use multiple strategies, with 67 percent of schools planning to offer some classes taught by high school instructors and some classes taught by college instructors. In addition, 27 percent of ECHSs planned to use the Advanced Placement courses, which are taught by high school teachers, to give students the potential to earn college credit if they pass the end of course exam.

School leaders must carefully consider who teaches these college-level course. As with decisions regarding location, the issue here remains the careful balance of offering students an appropriate environment that is conducive to educational success, namely earning two years' worth of college credit. Other factors affecting the teaching of college courses to ECHS students are discussed in greater detail in the next section on college instruction.

The New 3R's in College Instruction

This section addresses the new 3R's in college instruction. The first part is a discussion on relationships among staff and students at ECHSs. As noted earlier, the foundation emphasizes that students should be supported and motivated by positive relationships in academically rigorous programs that contain content relevant to their interests and future goals. Following the discussion on relationships is a discussion of evidence of rigor and relevance observed in college classrooms.

Relationships

As noted earlier, it is an expressed goal of the ECHSI that the climates of ECHSs foster strong relationships among staff and students and promote a college-going culture. The previous chapter discussed relationships in the context of high school classes; this section on relationships examines the extent to which the hallmark features of high expectations, respect and responsibility, and personalization exist for ECHS students in the college environment.

<u>High expectations</u>

High expectations at the college level reflect the degree to which college faculty anticipate that ECHS students will master challenging material and offer them the opportunity and support to do so. Interviews with college faculty revealed that some instructors were firm in their expectation that ECHS students would learn the required material, while other instructors struggled to maintain high expectations for ECHS students.

> College faculty may be more likely to maintain high expectations for ECHS students when those students take classes with regular college students.

Based on interviews, it appeared that instructors were more likely to maintain their usual standards for the class when ECHS students were enrolled alongside college students. College faculty cited a variety of reasons that they felt compelled—or encouraged—to maintain the same standards for all of the students in their classes, regardless of age. As a way to maintain the academic standards and expectations, some college professors spoke about the ECHS program design and the agreement among ECHS partners that students should be integrated into classes with other college students, rather then being in classes populated entirely by ECHS students. One professor pointed out that the transferability of college credit from the community college system to the state university system provided additional incentive to maintain high academic standards with all students, including ECHS students. Another college professor cited not the course credit, but his responsibility to the other college students in his class when he said, "Since this class is open to the general population, there are 5 [traditional college] students participating in the class. As a result, I have tried to maintain the same language I normally use."

In classes with only ECHS students enrolled, there was greater variety in the degree to which interviewed college faculty held ECHS students to high standards, with some of these instructors expressing confusion and uncertainty, and some expressing the belief that ECHS students could not be held to high standards. While one professor reported that he held his ECHS students to college expectations, provided the same content in class, and used the same syllabus that he used with his other sections, another professor said that he had difficulty knowing what previous skills and knowledge to expect from the ECHS students. Unlike the instructor above who mentioned his responsibility to other college students, one of his colleagues who taught a course solely to ECHS students posed the question, "What level of complexity are we to expect that they can be exposed to?"

Interviewed college faculty who taught classes solely comprised of ECHS students were more likely to modify the content of their courses or their delivery of the material. Citing the students' age and skills, several faculty members explained that they "didn't go into depth" or that they "geared down" the material. One stated quite firmly that he felt that the modification he had made to his curriculum was "appropriate." Even faculty who kept the content of their classes for ECHS

students consistent with the content they offered other college students were more likely to modify their delivery in an attempt to "reach" the high school age students. Faculty cited examples of modifications that ranged from providing additional explanations and discussion time to providing additional materials and practice.

These types of adaptations warrant further investigation and consideration. On the one hand, such adaptations may be a form of personalization, and in fact may improve the quality and quantity of instruction that students receive. On the other hand, such modifications could simply be slowing down the pace at which the class moves, prohibiting the instructor from addressing all of the topics that regular college students would be expected to master. These data, which illustrate some disparity in the level of academic expectations to which ECHS students are held in college courses, point to the need for ECHSs to consider and resolve the question: To what degree and in what ways should college courses be modified for high school students?

Respect and responsibility

> ECHS students' maturity level emerged as a key factor in the dynamic of their relationships with college instructors and college students.

As noted earlier, in addition to high expectations, the issue of respect and responsibility is a factor in promoting a college-going culture. Data suggest that at the college level, not only are teacher-student relationships important, but relationships between ECHS students and college students are important as well. Furthermore, ECHS students' maturity level emerged as a key factor that influenced the dynamic of these relationships. Overall, these two types of relationships play a role in students' perceptions about school and their ability to do well.

Data on the relationship between ECHS students and other college students were mixed. Interviewed ECHS staff tended to report that there were no problems between the college and high school students. But some ECHS students at schools located on college campuses said that they felt the college students did not accept them because they were younger. Students at one ECHS reported occasionally hearing comments such as, "Little kids get off our campus." While it is not clear whether this particular comment by a student at the college was based on an actual negative experience or was a generalized prejudice against the ECHS students, it is true that the level of maturity exhibited by ECHS students factors into the level of acceptance that they experience on campus and, ultimately, the level of success they achieve in college classes.

The evaluation team found mixed results at sampled ECHSs on students' ability to exhibit the appropriate respect and responsibility in a college environment, yet many ECHS students rose to the standard of conduct required—especially those attending classes with other college students. This mature behavior could be because (a) ECHSs only allowed more mature students to enroll in classes with college students; or (b) the college environment encouraged more mature behavior. A college administrator articulated the theory that older students can serve as role models to the ECHS students. Many ECHS students noted their appreciation for the maturity and seriousness demonstrated by the older college students. An ECHS student reported a sentiment similar to that expressed by several other ECHS students, when she said, "The people in college classes are a lot more mature… you know, they really care about their work." As noted earlier, many schools do not have all students enrolled in college courses. Once they do, it will be clearer if the college environment encourages mature behavior or if maturity is merely a trait of the students.

While some students rose to meet appropriate standards of respect and responsibility, others did not do so to the extent that their instructors hoped they would. A college instructor explained, "At the college level, we don't construct your life for you. We give students much more freedom. If you're not doing your work, we don't call your mom." But he also acknowledged the important role that college instructors play in providing appropriate structures and boundaries for ECHS students. He and his colleagues viewed it as their responsibility to introduce students to college routines and to articulate their expectations clearly without being condescending to students. He added, "I think we did a good job exposing them to lectures and homework, and responsibilities and deadlines." Similarly, another professor was initially concerned about the ECHS students' age, their safety, and whether or not they would have the maturity needed to access campus tutoring and other services. He also reported that early on in the course there were behavior problems with some of the ECHS students, which annoyed some of the other college students. Rather than just blame the ECHS students though, he mentioned that he made an extra effort to "set boundaries with the [ECHS] kids."

> Interviewed ECHS students generally appreciated the respect accorded to them by college faculty. In turn, the faculty were often pleasantly surprised by the students' sense of personal responsibility for their behavior and their work.

ECHS students reported that the respect shown to them by college faculty motivated them to meet their instructors' expectations. Many students in focus groups said that college faculty treated them "more like adults." Students frequently expressed their satisfaction with the degree of freedom and responsibility afforded them in their college classes. A student said, "The teachers don't hassle you about things. …They know it's your responsibility to get it done." The clear expectations set by professors as well as the students' appreciation of the opportunity to demonstrate their maturity and to take responsibility for themselves may have contributed to some students' ability to meet the expectations of faculty and school leaders. There were many instructors and school leaders who were impressed by the way ECHS students conducted themselves. An administrator said, with obvious relief, "You can hardly tell any difference. [The ECHS students] don't act silly and do juvenile things like we were afraid they [might]." And an instructor who took the time to establish clearer boundaries for his ECHS students said that in the end he felt his students exhibited the necessary motivation to succeed.

Despite the efforts of staff at all levels to communicate clear expectations and support students in meeting the increased demands of college courses, some ECHS students disappointed and frustrated their instructors with their attendance and behavior. ECHS students' irregular attendance in college classes was a problem at several sites, one that has potentially serious implications. One principal pointed out that absenteeism is such a "big problem that [it] really impacts [students'] progress; some students don't get college credit for a class." Absenteeism wasn't the only problem, however; some ECHS students did not seem to understand or be able to exhibit the kind of behavior usually expected in a college class. One professor complained that the ECHS students "are not ready to take college classes…They talk, they come late, they don't take it seriously." Although some college instructors complained about student behavior, the evaluation team found that faculty teaching classes primarily or solely comprised of ECHS students were more likely to complain of problems with student attitudes and behaviors.

<u>Personalized relationships</u>

At the college level, there are few—if any—of the formal structures that allow for the level of personalization found at the high school level. Depending on where and how students take their college courses, even class sizes may not be reduced. Despite these structural differences, most interviewed college faculty expressed some awareness of the principles of personalization and some interest in communicating care and concern to their ECHS students. College professors employed varied approaches to establishing relationships with ECHS students, including providing opportunities for students to share their experiences and interests in class and making an extra effort to help ECHS students master the material. For example, a history professor explained, "I see current events as a way to better connect with students and understand what is important to them. For example…some students mentioned [a newspaper article about a single father in the area]. This is an example of a sensitive issue that I wouldn't initiate with students myself, but is a concern relevant to many students." In another example, a professor of finance described how he developed elaborate "banking packets" for each of his ECHS students, something he had not done for students in the past. The packets contained checks and check registers customized with the students' names because, the instructor explained, he "really wanted the students to feel like they're already part of this as a team."

Interviewed ECHS students indicated that although their college professors were not as intimately involved with them as their high school teachers and guidance counselors, the professors were adequately supportive and caring. As discussed previously, students at many ECHSs said that their high school teachers were like family. When discussing their college instructors, students were more likely to use words such as "approachable" and "helpful." Despite the apparent difference in the descriptors selected by students, it is important to note that students were consistent in their positive comments about their relationships with college professors. Observers also noted instances where an individual student spoke with faculty about his or her progress and interests. In one particular case, a student spent time with his college sociology professor after a communications arts class, sharing and celebrating his success on a project that the sociology professor had helped him with.

In fact, there were only rare instances in which interviewed students pointed out a particular college instructor who did not seem caring enough. In one case, students complained about the instructor of an on-line course who they found demanding and inaccessible. In another case, a student told a member of the evaluation team about a professor who would start class late, end class early, and would not say much to students during the class period. Since students did not seem to hesitate to share such examples, it was apparent that they were the exception rather than the norm.

Rigor in College Instruction

The evaluation team found that ECHS students were enrolled in a variety of college courses at the sampled ECHSs, but a lack of prerequisite skills prohibited entry into mathematics classes and full credit English classes for many students. Site visitors sought to observe college English and mathematics where possible, but out of 12 observations conducted, only one was a college mathematics class. Two were college English classes, but one of those was a developmental class. The other nine classes observed comprised a variety of disciplines: art, anthropology, web design, history, biology, sociology, and speech.

In general, the instruction ECHS students experienced in observed college classrooms provided few opportunities to construct knowledge, synthesize information, communicate clearly, or to revise work.

In 2003-04, researchers found that the instruction observed in college classes did not afford students the opportunity to engage in active inquiry or in-depth learning. This trend continued in 2004-05. Across the sampled ECHSs, many students complained that they were bored and confused in lectures. Students complained that during lectures, they were "supposed to just sit there," and one student said that during the whole-class lectures in his economics class he had to fight not to go to sleep. Observations across sites and across disciplines confirmed student reports that instruction provided few opportunities for students to create or explore new ideas. Following are a few examples from the classroom observations.

> *In a web programming class, students sat at individual computer workstations watching the instructor demonstrate a series of skills. They then read aloud from a handout and followed explicit directions in a teacher-created "tutorial." They practiced skills in a sequence while the college instructor and the high school teacher circled the room, monitoring students' work on their screens.*

> *In a calculus class, the college instructor passed out a review sheet. He drew a graph and solved the first problem on the board. Students continued working on the review sheet individually or in pairs, asking the professor or the partner high school teacher for help when necessary.*

> *In a biology class, the professor drew chromosome pairs on the board and explained crossovers to the students. The professor then explained the different phases of meiosis. When she was finished, the professor asked the students if they all studied for the quiz, then instructed them to close their books and put away all their notes to take the quiz.*

Nevertheless, some instructors in the observed classrooms used a few promising strategies to increase the level of rigor. Research on college teaching has shown that in contrast to those instructors who view their role as transmitting knowledge to their students, instructors who focus on their students' prior knowledge, development, and changing world views are more likely to achieve deep and lasting learning in their students (Trigwell, 2001). Site visitors observed various examples of instruction, consistent with the characteristics of rigor, which offered students the opportunity to construct knowledge, connect new information to prior knowledge, or explore and defend ideas:

> *In a sociology class, the professor asked each student to make a list of the top 10 most influential people of all time in the world—from his or her own point of view. The students then shared their individual lists in small groups of 4-5 students, came to consensus on a group list, and posted their list on chart paper for the rest of the class to see. The teacher debriefed by first asking the class if there were any names they were unfamiliar with. Next the professor asked the students to think about what patterns they saw across the lists. He used probing questions to elicit responses from students.*

> *In an English class, the instructor pulled the students into a whole group circle. They read and discussed several poems, stopping regularly to discuss figurative language as well as to link the reading to other things that they had studied. The instructor focused on asking questions of the students to make them think critically about the literature and students discussed their ideas at length. Students also posed questions to the instructor and the group.*

<u>Assessments</u>

As mentioned in the previous chapter, assessments at the classroom level can be part of rigorous classroom activities. Assessments used in observed college classes tended to be traditional essays and tests, but some college faculty integrated performance assessment with instruction. Some instructors spoke about projects that were intended to engage students, provide opportunities to construct knowledge, and allow students to exhibit the knowledge they had gained. For example, one instructor reported that students had helped to develop the rubric on which an anthropology project would be evaluated. The teacher's construction of the performance assessment and the use of the student-developed rubric is an example of a promising practice supported by research on rigorous instruction (Schafer et al., 2001).

Relevance in College Instruction

As noted earlier in the high school instruction chapter, relevant assignments ask students to address questions or problems with real-world applications, to make choices about their learning opportunities, and to take on plausible roles and submit their work to real audiences. The evaluation team observed little evidence of relevance in instruction in the college classes. There were, however, a few notable exceptions. A sociology professor talked about an assignment on marriage and divorce, in which students were required to interview two people and incorporate information from their interviews into their essay. In a history class, students were invited to bring current events into a discussion about social and economic issues in the Progressive Era. Some students mentioned the fact that Congress was debating the minimum wage, and the professor pointed out to his students, "Pay attention to debates; the arguments are the same [as during the Progressive Era]." He noted that in any given debate, students should think about who will be affected, when, why, and how. He then told the students to read their newspapers and notice how the debate about the minimum wage plays out at the federal, state, and local levels. The professor then connected this topic to students' lives again by asking them how much they get paid in their part-time jobs.

At one ECHS, students spoke positively about projects in which they acquired new knowledge for the purpose of sharing it with other students. They seemed motivated by the opportunity to present to their peers on a topic that addressed a problem with real-world applications. One student shared his pride in having done research about HIV and presenting the topic to his Oral Communications class. Another student talked about how he had enjoyed and even "looked forward to" working on projects in several college English classes, citing the fact that he and his classmates had the opportunity to choose their own topics (within the constraints of the assignment).

While it may be the case that more instructors than these few place a high value on relating the substance of their discipline to students' lives and the real world, it seemed that most of the observed college professors believed in learning the material for the sake of the material itself.

Responsibility for Student Success

Interviews with college instructors and school leaders revealed that at some sampled ECHSs there was tension between the high school culture, in which it is most often considered the teacher's responsibility to present information in a way that helps students to learn and the college culture, in which it is normally considered the student's responsibility to learn the material. Comments from ECHS leaders at the high school level established their belief that teachers should take responsibility for "reaching" students. School leaders stated their expectation that teachers should be "student-centered" and should "base what [they] do on how students learn." But interviewed college administrators and faculty viewed the teacher's role differently. A college administrator reported a sentiment common among his colleagues when he said, "The general rule in college is that the professors present information, and it is the responsibility of the student to learn it. Our staff is approaching more from the standpoint that it's their job to present the information to the students and to make sure they understand it."

> Some interviewed college faculty associated with ECHSs accepted responsibility for student learning. However, much work remains to change the culture of college classrooms where the instructor's responsibilities end with the presentation of material.

However, at some IHEs in the initiative, college faculty are expected to meet student needs through the use of active learning and other student-centered strategies. For example, one IHE places a strong emphasis on pedagogy in evaluating professors for tenure so there is an incentive for instructors to integrate group work, experiential learning, and service learning into their repertoire of instructional strategies. College administrators at two colleges expressed the view that college faculty, like high school faculty, should know how to accommodate different learning styles and utilize a variety of research-based strategies—that, in fact, students should experience the same type and quality of instruction at the college level that they do at the high school level. As mentioned previously, however, and as evidenced by the evaluation team's findings, such beliefs were only evident at a few IHEs. In order to be successful with students, ECHS partners will eventually have to grapple with their sometimes incompatible ideologies about the roles of teachers and students.

ECHS Supports for College Courses

> Eighty-eight percent of the ECHSs offered support courses to ease the transition to college.

Clearly, one of the major hurdles ECHSs face is to provide enough support to students that they can be successful in college courses. In 2004-05, college supports overwhelmingly took the form of courses that cover college-specific topics. Such topics included skills necessary for college success (e.g., time management) but also those that introduced students to the new expectations of college environments. These types of support are described and discussed below. It is important to note that many supports for students who are taking college courses are actually provided by the ECHS, not by the IHE.

Eighty-eight percent of the ECHSs offered courses covering topics meant to ease the transition to college. One teacher described her course as helping students "bridge the gap" to college. She stated, "We offer a seminar class for Early College students to bridge the gap for them to college, to make the transition from high school to college." Still another teacher noted how college

transition courses were particularly important to ECHS students, as the students occupied a difficult position of being not quite high school students and not quite college students. Speaking of her school's college transition course, she said:

> *It's interesting because it's the combination of two different tracks that we've had [at the school]. One is dealing with affective needs and the other is dealing with academic needs. That seminar is the place where both come together and really get played out over a fairly large stage. All of our teachers are trained to be teacher-counselors...We had a student who had to make sure that the guys in his neighborhood didn't beat him up because he was going to college. So, there's a whole piece that's the cultural shift kids are making by going to college and that's not without its own challenges.*

Elsewhere, college transition courses were designed both to offer students discrete skills (e.g., note-taking, time management, etc.) and a chance to be mentored about college. One ECHS leader explained:

> *We have college advisory that meets twice a month. That's a small group of kids with an adult talking about what they need to do to get ready for college, what the application process is like, what kinds of jobs that kids should be looking at.*

One ECHS student, who was taking only college courses, spoke about how, in retrospect, such mentoring experiences were pivotal to her ECHS experience and indicative of the personalization she received while there:

> *I graduated high school in June last year, so I'm not really in high school anymore. I'm a full-time college student now. I got used to having the mentoring program here [at the ECHS]. At the time, I didn't think it was necessary, but now that I don't have it, I wish I had it. I think that was the best part of being in this program— having the [college advisory] seminar and people and teachers all paying attention to you.*

Some ECHSs approached easing students into the college environment by enrolling them in non-credit courses. One-quarter of the ECHSs that responded to the school survey (n=45) reported having students taking non-credit college courses. As stated above, in many cases, such courses were developmental in nature and designed to bring students to a point where they could succeed in more rigorous college coursework. In other cases, transition courses were focused on specific skills that students may need as they transition to college curricula.

The relative success of support structures at sampled ECHSs, such as college advisory, appeared related to the degree to which such supports are integrated into the school. That is, students and teachers should not be expected to attend or offer support courses without either incentives or requirements. As the example in the pullout box demonstrates, when supports are formalized and supported by the school, they can be very powerful.

Supporting ECHS Students in College

GTC ECHSs cater their services to a specific population of students: high school dropouts or students who are at risk for dropping out. For this reason, a wide variety of supports is integrated into the school. Below, a school leader described the steps her school took in supporting students in college courses.

When [students] transition [to college courses], we have three mandatory meetings with them: two are in groups, but the last one is an individual appointment with us. …Here we get into a more detailed education plan with them. In other words, what do they need again for high school graduation and what do they need for their Associate's degree? … And we strategically set those meetings up … right before certain drop dates. One of the things that is really a high priority is that we don't get them started negatively. In other words, when we see that [a student is] not progressing in a class, we suggest they drop it and take the 'W' [withdrawal].

…We will always stay connected to these students even after they've graduated. We're going to encourage them if they want to stay with us, but we're also going to have everything in place if they just see another counselor on [the college] campus. Everything we've done will be scanned into the computer system, where if [students] go see another counselor, [the counselor] can bring up the [their education plan]. … We're hoping that we're going to see them less and less as time goes on. But we'll always be here for them.

Intermediate Outcomes

Measuring student performance at the college level will best be accomplished in future years as more students take college courses and data on successful college course completion are made available through the Student Information System (SIS). However, anecdotal evidence demonstrates that while some students struggled in the college setting and may have required more support, other students were already thriving.

There were some instances of students struggling in college classes, sometimes due to their lack of skills before beginning college courses. For instance, one ECHS leader explained that students struggled taking a college science course. In a chemistry class at another IHE, students struggled even after attending chemistry classes in 10th grade at the ECHS. As the ECHS leader explained, "They didn't put them in an entry level [college] chemistry [course], they put them in a little bit advanced, but we had to go back because the kids weren't ready for it—they had no mathematics."

Some interviewed college faculty also complained specifically that the ECHS students in college classes did not have sufficient writing skills. At one ECHS, a college professor complained that the students did not turn in well-written essays. Another college professor stated, "The writing is below what I'm used to."

> Thus far, there were many anecdotes of students' successes in college classes and just as many examples of frustration and struggle.

However, interviews revealed that there were also many instances of individual students and groups of students performing well in college courses. A college leader stated, "We have three students in the Intro to Foreign Language classes and they are blowing some pants off." A teacher from another ECHS explained, "A lot of the high school students do better than the college students." In fact, one community college instructor noted that he had encountered no problems having high school students in his class, and that he could not tell them apart from other students and could only identify them through their shy behavior at the beginning of the semester. He felt that the high school students contributed a lot to the discussions and had a lot of "academic prowess." On a broader level, an intermediary representative said, "Students are in college classes and have seen achievement gains. Student GPAs are holding the same after they enter college courses." Finally, one community leader spoke eloquently of the extraordinary effect of the students' success in college courses on the ECHS students in his community: "The program has done a lot to build self-esteem because students have seen themselves being successful at college work."

In addition to the ECHS staff citing students' successful performances and good behavior in college courses, many interviewed students were also proud of their performance in college classes and cited particular assignments and tests as points of pride. One student stated, "Some of the high school students get better grades than the college students. We are here for a reason, so we take the classes seriously. We want a grade on our transcript." Another student explained, "I liked the second take-home test in sociology because I scored higher and learned a lot of new words, and my vocabulary increased."

College-going Plans

Another indicator of program success will ultimately be students' post-ECHS college attendance. Clearly, it is too early to collect these data. However, an early indicator of post-ECHS college attendance is students' intention to continue their college education. With this in mind, the evaluation team asked students in focus groups about their post-ECHS plans. Some students were very unsure about their post-ECHS plans; for example, one student stated, "After this, I'm going to try and get my Associate's degree, but after that I'm not really sure what I want to do. My whole life I've been really interested in music. I play the guitar, and that's what I really love doing, so I'll probably consider doing something with that."

On the other hand, some students in focus groups described solid plans and goals post-ECHS. Some students detailed their specific plans for the future, including classes they were taking for future majors and schools they were planning on applying to. Based on interview data, it appears that students with specific future plans tended to be older students (11th grade and above). One 12th grade student, for example, explained her future plans in detail: "I'm going to [a state university]. I wanted to do communications as a major, but [the partner IHE] does not have it. I'm most likely going to be an English major with journalism as a minor. I'm cringing because I'm thinking I'm going to take AP level again and it was so stressful with all the writing. But I'm going to take it on. Hopefully in the future I'll be working at an entertainment magazine as some type of editor or something."

Chapter Summary

Despite the initiative being relatively young, significant strides have been made initiative-wide in the implementation of the college component of the ECHS experience, as evidenced by the fact that the vast majority of ECHSs had at least some of their students enrolled in college courses in 2004-05. Schools took varying approaches to developing course sequences and curriculum plans, as well as to developing structures to support students' success in college and eventual acquisition of 60 credits. For example, schools dealt with decisions about integrating ECHS students with other college students on the college campus or providing college courses in a more sheltered environment—either on the high school campus or in classes comprised only of ECHS students. Anecdotal evidence demonstrates that while some students struggled in the college setting and may have required more support, other students were already thriving. Following is a summary of some of the findings from this chapter.

- Schools demonstrated varying degrees of preparedness for the challenge of supporting ECHS students in college courses. The better prepared ECHSs collaborated with their IHE partners to develop detailed curriculum plans covering all school years.

- Schools took the initiative to address the challenge of providing all ECHS students access to college courses. While some enrolled students were able to meet college entrance and placement requirements, other schools found that some students were unable to pass these exams. One response to this problem was to enroll students in developmental college courses, which have the benefit of providing additional academic preparation, but may not provide college credit.

- While few colleges offer formal structures to increase personalization (such as "houses" or advisories), most college faculty expressed an interest in communicating care and concern to their ECHS students. Additionally, many ECHSs featured a college support class designed to teach skills necessary for college success and introduce students to the new expectations of college environments.

- Although site visitors observed some examples of instruction that offered students the opportunity to construct knowledge, connect new information to existing knowledge, or explore and defend ideas, and many interviewed ECHS and IHE leaders believed that instruction should be engaging and active even at the college level, instruction observed in college classes was primarily teacher-centered in its approach and delivery.

- Some instructors at partner IHEs struggled to determine appropriate expectations for ECHS students in college classes. The evaluation team found, however, that college instructors who taught ECHS students alongside other college students were more likely to hold their ECHS students to the same standard as their other college students than those instructors who taught ECHS students alone.

- Individuals from various partner groups across the initiative cited examples of students meeting, and even exceeding, expectations in college classes. Students attending college classes were proud of their accomplishments, citing their success on challenging exams and assignments and their progress in accumulating credits.

CHAPTER VI: Summary and Next Steps for the Evaluation

This second annual evaluation report on the Bill & Melinda Gates Foundation's Early College High School Initiative has found the ECHSI developing rapidly. The number of schools serving students in 2004-05 essentially doubled in a year, rising from 24 to 49. All told, ECHSs were educating about 7,000 young people during that school year. The initiative's expectation continues to be that by 2008 over 175 fully-implemented Early Colleges will serve at least 70,000 students nationally.

The uniqueness—and boldness—of the Early College concept is a belief that students who are traditionally underrepresented in higher education will be motivated to accelerate their learning if presented with a publicly-supported opportunity to earn both a high school diploma and an Associate's degree or two years of transferable college credits—all in four to five years. The theory for accomplishing the development of ECHSs rests on multiple layers of partnerships; a blended high school-college program of studies characterized by academic rigor, relevant content, and strong interpersonal relationships; multiple student support structures to prevent students from failing; and possibly the need to extend interventions down to the middle school grades to ensure that incoming 9th grade students have adequate literacy, numeracy, and social skills to be successful in the program.

As the ECHSI matures, lessons learned are beginning to refine the characteristics of the schools that are being developed. During the 2004-05 school year, several key findings emerged from data collection at the school and classroom levels:

- First and foremost, as intended, ECHSs enrolled students who are representative of populations traditionally underserved in higher education. On average, the ECHSs had six percent *more* minority students than expected given the demographics of their feeder district(s) and proportions of students qualifying for the free and reduced-price lunch program that mirrored the district profile. However, ECHSs are not serving English language learners or students with IEPs in proportion to their districts.

- Second, several fledgling ECHSs have discovered the need for a judicious approach to introducing 9th graders to college experiences. The schools are finding that building a college-going culture requires careful attention to the development of an ethic of personal responsibility. Failure to do so can threaten the local school-college partnership if students misbehave or generally "act their age."

- Third, nearly all of the ECHSs (90 percent) had at least *some* students enrolled in college courses during 2004-05—sometimes on college campuses, sometimes in the ECHS. The schools incorporated multiple strategies for offering college courses for credit. In comparison with situations where ECHS students are mixed in with traditional college students, it appears that college instructors are more likely to adapt their classroom strategies (and perhaps reduce the rigor of a syllabus) if they are teaching a class composed solely of ECHS students.

Data from interviews and observations at the school and classroom levels pinpoint several issues that have not yet been resolved and will require the initiative's attention in the near future. These

are issues affecting multiple schools that will benefit from discussions within the ECHSI network, leading to solutions that will move the entire initiative forward. They include the following:

- As the schools mature, they continue to experience a tension between the Core Principles of (1) working with challenging students; and (2) maintaining high expectations and a rigorous curriculum for all students. This leads school leaders to a dilemma about whether to keep all enrolled students in the program or whether some students should be counseled out. Few sampled schools had clear policies governing this situation.

- While there was ample evidence of strong personalized relationships between ECHS students and teachers, there was very little evidence of personalized or individualized learning plans in sampled ECHSs. If individualized plans are still a goal of the ECHSI, renewed attention should be paid to the development and implementation of them.

- There is a pattern across the ECHSI of an increase in the academic and social support services available to students as the schools mature. However, to be effective, evidence suggests that these need to be both plentiful and required for the students who need them. Many sampled ECHSs did not make support services mandatory.

- In addition to blending high school and college curricula, the ECHSI should lead to new and more effective instructional strategies for both levels of education. This is likely to remain only a hope, rather than an actual goal, unless local partnerships do more to encourage (or require) meaningful dialogue about teaching and learning that involves both ECHS and IHE faculty. There was little activity in this area in sampled ECHSs.

As the early chapters of this report describe, the ECHSI is conceptualized as a series of nested partnerships. Individual schools may survive and thrive without this superstructure, but the initiative itself will not achieve its goals of scalability and sustainability unless it consistently analyzes its progress and adjusts its theory of change and priorities based on lessons learned. Many indicators suggest that the ECHSI is an effective, self-reflecting association of entities with shared goals. For example:

- Based on its experience with several high school reform initiatives, the foundation has identified several factors that contribute to the viability and sustainability of reform models, including the specificity of a model's design for replication.

- In response to increased accountability requirements between the intermediary organizations and Jobs for the Future (acting for the foundation), the intermediaries have increased their emphasis on accountability for the ECHSs in their networks. Most intermediaries have established benchmarks for their schools. In some cases, site selection and technical assistance are linked to the benchmarks. Few intermediaries, however, have exit strategies in place for ECHSs that are not making adequate progress on the benchmarks.

- With the assistance of the intermediaries and JFF, local partnerships between IHEs and school districts or other partner entities are solidifying and stabilizing.

Despite these signs of the strength of the initiative, several major challenges lie ahead. The most critical challenge is identification of resources that will sustain the schools. In almost all cases,

the path to sustainable funding for ECHSs is not yet clear at any level of the initiative. Continued advocacy for friendly dual enrollment policies at various levels of government will clearly be needed for some time to come. However, the most mature ECHSs may come to the end of their foundation support before policy answers can be enacted. Resolving the resource issue is the top priority on the minds of ECHSI leaders.

Next Steps

Thus far, the major focus of the evaluation has been on how the ECHSI is functioning, how ECHSs are implemented, and what ECHSs look like. The 2005-06 academic year marks the midpoint in this seven-year evaluation. At this midpoint, the focus will shift from implementation to outcomes. This shift is possible for two reasons. First, as shown in Exhibit 10, the ECHSs will have students old enough to achieve some of the outcomes of interest. Students attending the earliest cohort of ECHSs will have spent at least two years in the school, giving them more exposure to the ECHS environment. Since the No Child Left Behind Act mandates testing students at least once between 10th and 12th grade, students in states that administer assessments in 10th grade will have achievement data available. Also, older students are more likely to have the opportunity to take college courses. Second, the 2005-06 academic year marks the full roll out of the Student Information System (SIS), a data management system being overseen by JFF. This system will be the primary source for student outcome data in the ECHSI.

Exhibit 10: Progress of the Majority of Students Through ECHSs

Academic Year	Evaluation Timeline	ECHS Opening in 2003: Highest Grade Level For Most *	ECHS Opening in 2004: Highest Grade Level For Most	ECHS Opening in 2005: Highest Grade Level For Most
2002-03	Planning Year			
2003-04	Data Collection Year 1	9		
2004-05	Data Collection Year 2	10	9	
2005-06	**Data Collection Year 3**	**11**	**10**	**9**
2006-07	Data Collection Year 4	12	11	10
2007-08	Data Collection Year 5	13	12	11
2008-09	Final Year (Data Analysis)			

* Some ECHSs implemented 5-year programs. In these schools, the students finish after grade 13.

The data collection activities in 2005-06 will include all of the same activities as in 2004-05. The evaluation team will interview all intermediaries (including three additional sub-intermediaries working with The Texas High School Project) about how their work is progressing, how they think their schools are doing, and their future plans. All open ECHSs will receive a school-level survey (about 75 schools during 2005-06).[16] ECHS site visits and leader telephone interviews will allow the evaluation team to check in with 24 ECHSs. These activities will continue to address many of the issues discussed in this report, such as features of the school, ongoing plans, how students are doing and how they feel about the school, the quality of

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[16] During the 2004-05 data collection, AIR/SRI administered a paper and pencil survey to all open ECHSs. During the 2005-06 data collection, JFF is administering the survey online to all the ECHSs with which JFF works.

instruction in college and high school courses, sources and quality of any technical assistance received, and any issues that are important to each site (as either facilitators or barriers).

In addition to analyzing the data resulting from the activities listed above, the evaluation team will be analyzing SIS data. In this first roll out year, the SIS should provide information regarding high school and college courses taken and credits completed, grades received, and assessment scores. As more schools have graduating classes, the evaluation team will also be able to use the SIS to track diplomas earned.

As these findings indicate, the ECHSI faces complex challenges on the road ahead. One of the most persistent challenges appears to be in the work involved in crossing the divide between the secondary and postsecondary systems. This challenge is a major concern for many leaders as they worry about developing funding models for the long-term support of ECHSs, particularly when funding college courses and their related costs (e.g., textbooks). Because the initiative is still so new—the 2004-05 academic year was only its third year—an important question remains unanswered: Do the ECHSs help students succeed? Clearly, knowing the answer to this question and others will greatly help the long-term growth and sustainability of the ECHSI. As the AIR/SRI evaluation has three more years of data collection activities planned, these issues will be addressed in future reports.

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