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Early College High School Initiative Evaluation Year End Report: 2003–2004

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This report is part of an ongoing series of interim reports based on the evaluation of the Bill & Melinda Gates Foundation's Early College High School Initiative. The views, findings, conclusions, and recommendations expressed herein are those of the authors and do not necessarily express the viewpoint of the foundation. Direct inquiries to Andrea Berger at 1000 Thomas Jefferson, N.W., Washington, DC 20007 or aberger@air.org.

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Introduction

The Bill & Melinda Gates Foundation's Early College High School Initiative (ECHSI) seeks to create a network of small schools that blend high school and college experiences. Early College High Schools (ECHSs) are designed to provide students with the opportunity to earn 2 years of college credit in a compressed time frame at public expense while simultaneously earning a high school diploma. The ECHSI is intended to serve students from groups traditionally underserved and underrepresented in higher education and is targeted to first-generation, low-income, English language learner, and minority students.

Structurally, the ECHSI can be viewed as a network of supportive relationships funded by the Bill & Melinda Gates Foundation. The nonprofit organization Jobs for the Future (JFF) oversees and facilitates the work of the initiative overall. The foundation and JFF work directly with intermediaries, who receive grant money from the foundation. These intermediaries represent a mixture of higher education institutions, philanthropic foundations, and education- or community-based organizations located across the United States. Intermediaries work with local partnerships, which must include an institution of higher education (IHE) and a provider of secondary education (e.g., a public school district or other entity), to create ECHSs. Once the initial partnership is established, the intermediaries oversee the relationship, provide or arrange technical assistance to the local partnerships and the ECHSs, and facilitate the development of a learning network among all the schools connected to a given intermediary.

This first annual evaluation report on the ECHSI is based on surveys, interviews, and site visit data collected during the 2002–2003 and 2003–2004 academic years. It includes the first 10 intermediaries funded through this initiative.

Description of ECHSs

School Characteristics

The 22 ECHSs were fairly evenly divided between new schools starting from scratch and existing schools that were adapting to exhibit features of ECHSs. A number of these schools were charter schools. On average, ECHSs enrolled about 68 students per grade, far fewer than the suggested maximum of 100 students per grade, and the majority of operational ECHSs in 2003–2004 enrolled only 9th or 9th and 10th grade students. Although middle school outreach is a core feature of ECHSs, no ECHSs enrolled grades below ninth, and few had close relationships with middle schools as of the 2003–2004 school year. The ECHS model requires a local partnership between an institution of higher education and a school district or other entity legally authorized to operate a school. In 2003–2004, the majority of IHE partners were 2-year institutions.

ECHSs were located at four types of facilities: facilities shared with other schools, IHE campuses, office buildings, and their own school buildings. Locating ECHSs on IHE campuses reduced some of the logistical challenges involved in delivering college courses to high school students. Schools located in their own school buildings received the fewest complaints from staff and students.

However, at most location types, students and staff complained of inadequate facilities, transportation challenges, and crowded spaces.

ECHS Students and Staff

ECHSs recruited and enrolled underrepresented students, an ECHSI Core Principle. Some schools sought out students with academic and social difficulties. Success in recruiting underserved students amplified challenges in moving students successfully through a rigorous high school and college curriculum. This is an essential tension within the initiative.

ECHSs have been successful in attracting the basic instructional staff needed during the early phase of implementation. Most did not yet have the enrollment to allow hiring specialized personnel. Instructors filled in for missing support staff, a role for which some instructors felt unqualified. Some staff felt that ECHS leaders were spread too thin. To gain extra assistance, some leaders delegated tasks to others.

Attributes of Effective High Schools

The foundation's work with high school reform includes key features that reformed high schools should exhibit. These schools should have a professional climate where teachers receive the professional development they need, instructors have time to collaborate and support each other, and instructors have input in school decisions. With relatively few students, ECHS instructors should be better able to personalize instruction and engage parents in student learning. The small size should also make it easier for staff to keep the school safe and orderly. Students should receive the academic and social support they need to be successful in the ECHS. And all staff, at the high school and college, should expect that all students will succeed in the ECHS.

The evaluation has produced some initial findings regarding these attributes. ECHSs had or had started to set up activities to develop strong professional communities. However, in most ECHSs, there was little evidence that the IHE instructors viewed themselves as part of the ECHS professional community, and few reported receiving training on instructing high school students. Students almost universally mentioned the personalized environment as a benefit of their ECHS. Teachers said that this personalization assisted their work with students and in engaging parents. It also helped to keep the schools safe. Many ECHSs, particularly adaptation schools, had highly developed supports for students. Yet, some support activities were too informal or poorly attended to have dramatic impacts, and some schools put off setting up programs. High expectations for all students, although generally evident in high school instructors, were less evident in IHE faculty. There was some evidence that faculty at 4-year IHEs had difficulty believing that the high school students would be prepared to succeed in more than a few college courses.

Curriculum and Instruction

ECHSs have adopted a range of approaches to integrating college courses. Some ECHSs offered courses at the high school site; some gave them on the college campus. Some ECHSs relied primarily on high school instructors to teach college courses; others had only college faculty teaching these courses. Many ECHSs offered college courses just for high school students, but a few

integrated high school students with college students. Some ECHSs that were open in 2003–2004 had not yet outlined a full 4- or 5-year curriculum leading to a high school diploma and 60 units of college credit.

The preponderance of instruction observed in both high school and college classrooms during 2003–2004 must be described as traditional. Nevertheless, some instructors used student-centered instructional strategies, and others recognized that they could learn to diversify their approaches to helping students learn.

ECHS Implementation Facilitators and Barriers

JFF both coordinates the overall initiative for the foundation and serves as a support to intermediaries. JFF's work includes identifying or providing technical assistance needed by the intermediaries and spearheading efforts to improve the policy environment for blended high school/college models such as ECHSs. As JFF's role has shifted to include more accountability work with intermediaries, intermediaries in turn have shown improvements in their compliance with accountability procedures and activities. Intermediaries represented a range of organizational types and adopted a wide range of development strategies. In general, intermediaries that worked in multiple states faced more implementation challenges than those working in a single state.

The district partners have largely been beneficial to school implementation. New schools associated with a district had fewer struggles concerning facilities and human resources than did schools opening outside of the local school district (e.g., charter schools that are their own district). The ECHS model also requires the participation and active leadership of IHEs as part of the local implementation partnership. Interviews with IHE-based respondents and ECHS leaders suggested wide variation in the level of commitment of participating IHEs to the ECHS concept, ranging from broad-based enthusiasm among faculty and administrators to outright skepticism.

Policies

State Policies

In general, state policies concerning the establishment and management of charter schools and rules governing dual student enrollment were supportive of the ECHSs. Depending on state law, charter schools typically have more control over issues such as curriculum, budget, and staffing. For many ECHS students to be able to meet the goal of earning 60 credit hours, favorable dual enrollment policies are essential. Other state policies, such as credentialing requirements, potentially limit the options available to developers of ECHSs. One challenge, as JFF and the intermediaries are discovering, is that a policy change that has a detrimental effect on one intermediary's work may have a beneficial effect or no effect for other intermediaries because of differences in the ECHS implementation models.

Federal Policies

In terms of federal policy, the most significant legislation affecting ECHSs is No Child Left Behind (NCLB). Of the law's regulations, intermediary and school staff most often discussed the provisions about highly qualified teachers. The other frequently mentioned regulation was adequate yearly progress (AYP), a concern for 5-year programs since the measure is based on 4-year graduation rates. Another federal policy that is adversely affecting some ECHSs relates to undocumented students. Federal law prohibits illegal aliens from receiving federal student financial aid and from receiving state tuition rates at public IHEs.

Assessment and Accountability Policies

Over the past decade, the use of assessments for a variety of purposes has increased markedly. Since most ECHSs are public schools and all 40 states with charter school legislation require the students attending public schools to follow all state assessment mandates, ECHS students will be subject to the same assessment requirements as their peers. At the college level, assessments are also high-stakes processes for the students. ECHS students who do not earn the minimum score for the placement tests will not be eligible for enrollment in most of the courses required to earn an A.A. degree.

Key Funding Issues

In interviews with ECHS implementers, several key funding issues were mentioned regularly. The first issue concerns funding college courses. In 2003–2004, many IHEs agreed to provide instruction for free or for very low fees. However, this approach cannot be sustained over time. Other ECHSs started out by paying for college instructors to come to the high school to teach courses. The second issue is that many ECHSs still feel severely underfunded by the foundation. The third issue concerns general sustainability of the ECHS features. Most ECHS leaders had concerns about their schools' longevity, given that the model, according to several respondents, is a very expensive proposition. Many ECHS leaders noted that expenses that are covered by grant money will soon need to be covered some other way, but the details have not been worked out yet. Several leaders noted that they thought the real solution to sustainability would necessitate policy changes at the state and national levels.

Current Findings and Future Work

The ECHSI has already achieved much in a short time. The data presented in this report highlight several notable accomplishments of the initiative:

- Twenty-two ECHSs have opened and are serving approximately 3,500 students, primarily from racial and ethnic minority groups and from low-income families.
- The 10 intermediary groups profiled have established many local partnerships and are learning how to nurture and solidify these local relationships.
- With the foundation, the "coordinary" (JFF) has developed an accountability plan to help the intermediaries track the progress of local partnerships and ECHSs.

- Most ECHSs are making good-faith efforts to create environments for teaching and learning that are characterized by the key attributes of high-performing small schools endorsed by the foundation.
- Most of the operating ECHSs devised strategies to introduce even ninth-grade students to college courses and/or a college campus.

Clearly, a tremendous amount of work has been accomplished. However, many hurdles remain as the initiative continues to grow. Issues that seem particularly important at this stage of the initiative's development include:

- Refining and streamlining the capacity of intermediaries, especially those with national ECHS networks, to continue to develop new local partnerships while simultaneously supporting the existing schools.
- Ensuring that every local partnership is rooted in a written and signed agreement that clearly specifies the responsibilities of every partner involved with an ECHS's development.
- Intensifying efforts to lobby for ECHS-friendly national, state, and local policies, specifically policies that will provide stable funding and improved physical facilities for the schools.
- Broadening the base of support for the ECHS among faculty and administrators at each of the participating IHEs, but particularly at 4-year institutions.
- Engaging both high school and IHE faculty in professional development that focuses on student-centered teaching and learning and the development of diversified instructional strategies.

Next year, the evaluation team will again collect data from ECHSs through site visits, document collections, interviews, and a survey. The 2004–2005 data collection will include 13 intermediaries and about 50 ECHSs.

Chapter I. Introduction

The Bill & Melinda Gates Foundation's Early College High School Initiative (ECHSI) seeks to create a network of small schools that blends high school and college experiences and encourages high school students to accumulate college credits while attending high school. The foundation's commitment to developing and supporting such schools is fueled by one key mission of the foundation—that all students graduate from high school ready for college. High school graduation rates across the country are alarmingly low, and even when students graduate from high school, many fail to take the next step to college. The percentage of high school graduates who attend college soon after graduation tapers even more dramatically for lower-income students and for students from certain racial/ethnic groups (Venezia, Kirst, & Antonio, 2003). The ECHSI was developed to keep traditionally underserved students in school and give them an opportunity to earn college credits as part of their secondary education.

In some ways, the ECHSI is a high-risk investment for the foundation. To date, there are no "proof points" that the high schools the foundation envisions, are successful. However, there are a number of small high schools across the country that have blurred the boundary between high school and college, and these schools have provided important lessons for the foundation. One of these schools opened in 2000 through a partnership between a public school district and a private, 4-year institution of higher education and provides students with the opportunity to earn a high school diploma and 2 years of college credit in 4 years. However, this specific blended high school/college model serves a somewhat privileged population (students who have been successful in their education). In designing the ECHSI, the foundation has adapted the model to include the explicit goal of serving low-income and minority student populations, including English language learners.

Over the next several years, the foundation has committed to supporting the development of about 175 Early College High Schools (ECHSs) that are characterized by a set of Core Principles (Jobs for the Future [JFF], 2002). These schools will be small, autonomous institutions where:

- Students earn an associate's degree or 2 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.

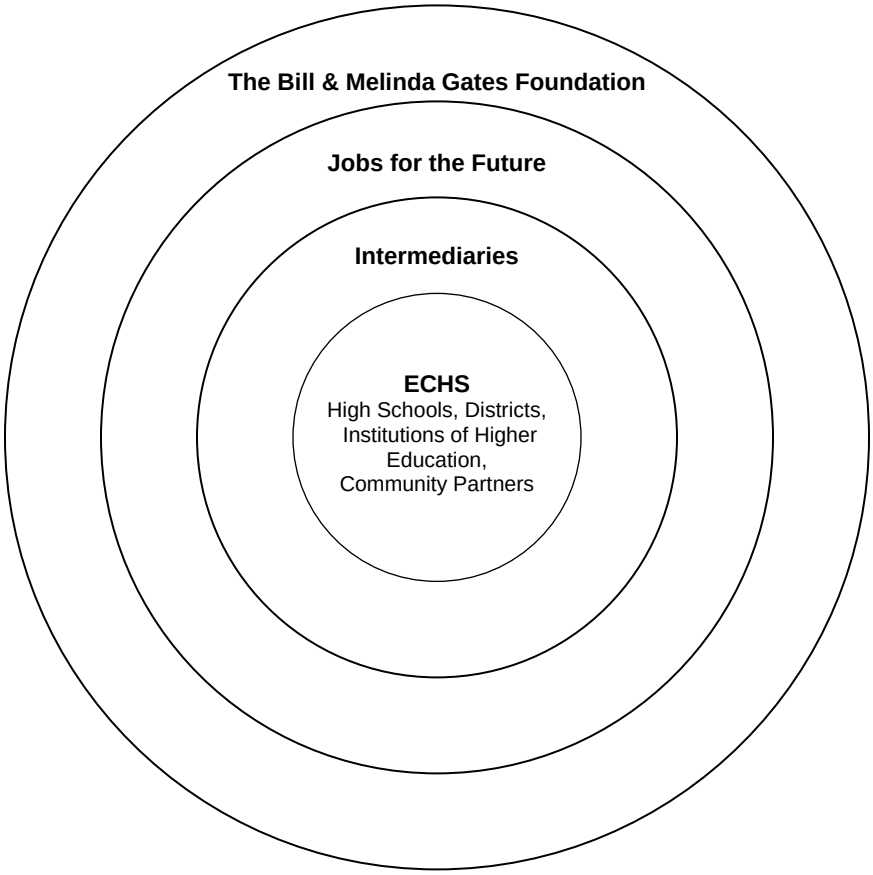
In addition, ECHSs are expected to reflect other key attributes of high-performing small schools, which include:

- A common focus on key, research-based goals and intellectual mission.
- Small, personalized learning environments, with up to 400 students per school.
- Respect and responsibility among students, among faculty, and between students and faculty.
- Time for staff collaboration and the inclusion of parents and the community in an education partnership.
- High expectations for students on the part of the school staff, including the expectation that all students will engage in an ambitious and rigorous course of study.

- Technology as a tool for designing and delivering engaging and imaginative curricula.[1]

Structurally, the ECHSI can be viewed as a network of supportive relationships (Figure 1). The ECHSs that are at the center of the figure are supported in some way by each of the other levels. As the outermost level, the Bill & Melinda Gates Foundation initiates the process through grants to the initiative's intermediary groups. As a superordinate intermediary, JFF oversees and facilitates the work of the initiative overall. The intermediaries represent a mixture of higher education institutions, philanthropic foundations, and education- or community-based organizations and are located across the United States. Intermediaries work with local partners, which must include an institution of higher education (IHE) and a provider of secondary education (public school district or other entity), to create ECHSs. Figure 2 describes the 10 intermediaries included in this report and the number of ECHSs each intermediary plans to open.[2] The foundation expects the initiative to scale up quickly, with up to 175 ECHSs in operation within a few years.

Figure 1. Early College High School Initiative Network of Partnerships



[1] These attributes also underlie the Bill & Melinda Gates Foundation's National School District and Network Grants Program, which has been supporting the development of small high schools across the country since 2000.
[2] As of January 2005, the foundation had funded 13 different intermediaries as part of the ECHSI. However, the data for this report include only the first 10 intermediaries.

Figure 2. The First 10 Early College High School Initiative 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. Antioch had 3 schools in this sample and intends to open 8 ECHSs in Washington and 10 ECHSs nationwide.

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. CUNY had no ECHSs in this sample and intends to open 10 ECHSs in New York City.

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. FCCC had no ECHSs in this sample and intends to open 15 ECHSs in California.

Gateway to College, Portland Community College (PCC). PCC is a large, comprehensive community college located in Portland, Oregon. PCC's Gateway to College offers alternative routes for high school completion and college preparation. Gateway to College, located on the PCC campus, serves students who have not been successful in the traditional K–12 system. PCC had no ECHSs in this sample and intends to open 17 ECHSs nationwide.

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. KWF had 1 ECHS in this sample and intends to open 10 ECHSs in Ohio.

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. The developers of Middle Colleges believe that by situating schools on a college campus, they can help at-risk students move beyond their limitations. MCNC had 10 ECHSs in this sample and intends to open 30 ECHSs nationwide.

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. The NCLR ECHSs will be located in areas serving largely Latino communities. NCLR had 2 ECHSs in this sample and intends to open 12 ECHSs nationwide.

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. SECME had 1 ECHS and 1 preparatory program in this sample and intends to open 8 ECHSs nationwide.

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. UP had 1 ECHS in this sample and intends to open 6 ECHSs in Utah.

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 selective institutions of higher education, including flagship state universities and top private institutions. WWNFF had 4 ECHSs in this sample and intends to open 14 ECHSs nationwide.

National Evaluation

The AIR/SRI evaluation team is responsible for documenting the process and outcomes associated with the ECHSI. This work is guided by three major research questions:

What are the demographic, structural, organizational, and instructional characteristics of ECHSs?

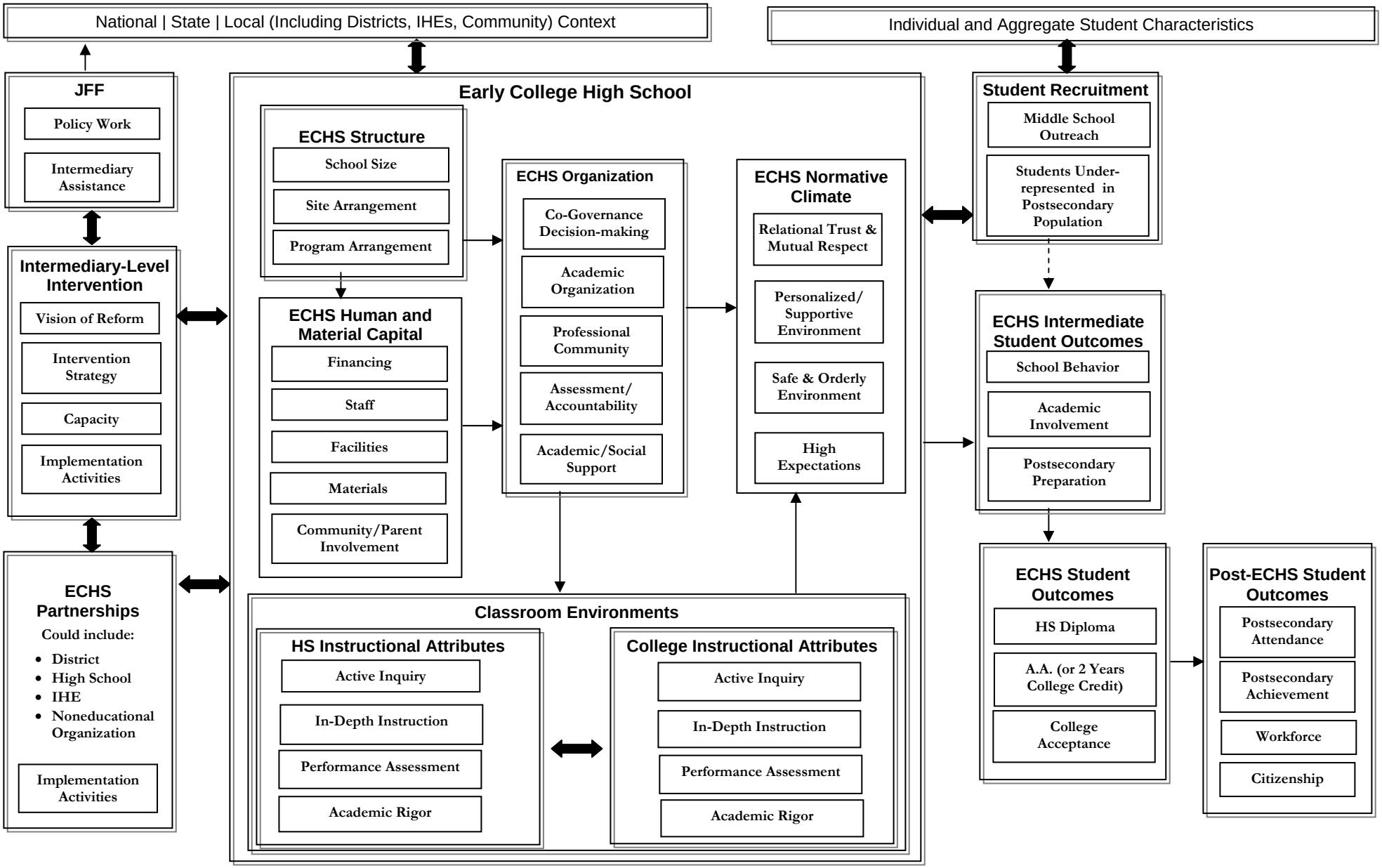
What factors support or inhibit the planning and development of ECHSs?

What are the intermediate and long-term outcomes for students attending ECHSs, especially for students traditionally underserved by the postsecondary system?

These questions are quite global. To answer them, the evaluation must examine complex interrelationships of actors and factors that, theoretically, contribute to eventual outcomes for students. To guide its work, the evaluation team developed a conceptual framework (Figure 3). The top of the figure includes contextual and environmental factors that may facilitate or inhibit the development of ECHSs. The left side of the conceptual framework identifies the partners discussed above (and depicted in Figure 1) and the interorganizational relationships associated with the planning and implementation of an ECHS. These interrelationships include Jobs for the Future (JFF) supporting the intermediaries, the intermediaries fostering the local ECHS partnerships, and both the intermediaries and the local partnerships supporting the schools themselves. The center of the conceptual framework represents the ECHSs. The variables within each ECHS represent both the dimensions on which ECHSs might vary (e.g., structure) and the dimensions that all ECHSs should possess (i.e., the attributes listed earlier, such as high expectations and a small, personalized environment). Since all ECHSs will blend high school and college courses, the center of the figure represents both levels of courses 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. As mentioned above, the ECHSI targets a specific population: students who are traditionally underserved in postsecondary education. The goal of ECHSs is to enable students to earn a high school diploma and 2 years of college credit or an A.A. degree.

The conceptual framework guiding the evaluation design is complex and comprehensive. This first report, coming as it does near the start of the initiative, provides initial descriptive information on the relationships and characteristics depicted in the left and center portions of Figure 3. Intermediate and summative outcome measures will be addressed in future year-end reports.

Figure 3. Conceptual Framework for the Early College High School Initiative



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.

The national evaluation plan combines qualitative and quantitative data collection methodologies to document and describe the activities of the partners noted in Figure 3. In the early years, the evaluation will rely heavily on qualitative methodologies, including interviews (both in person and on the telephone), observations, and documentation collections. These activities will be conducted in a sample of ECHSs. Some basic data about each school, including program characteristics, student demographics, staffing distributions, and attendance and graduation rates will be collected through a survey of each ECHS each year. Between the qualitative data collection activities and the survey, the evaluation will obtain data on most aspects of Figure 3 but will brush only lightly on student outcomes. Starting in 2005-2006, the evaluation team will have access to a database containing information on all students attending ECHSs, including student assessment results, courses taken, grades, and attendance. These data will come from district or state records and will allow the evaluation to track student progress toward high school graduation and in college credit accumulation. By collecting and analyzing course descriptions, the evaluation will be able to investigate the rigor of students' course sequences. In addition, this database should also include information on students enrolled in other high schools, allowing for comparisons between ECHS students and other students. Importantly, the database will include information on each student that will allow the evaluation to track the students after leaving the ECHSs. By tracking students over time, the evaluation will be able to shed light on the student outcomes listed in Figure 3. Table 1 includes a brief outline of the timeline and data sources for the national evaluation.

Table 1. Timeline and Data Sources for the ECHSI National Evaluation

Data Collection Year	Data Sources					
	Intermediaries: Interviews	ECHS Leaders: Interviews	ECHS Site Visits	ECHS School Survey	ECHS Database	Course Descriptions
2002-2003	ALL					
2003-2004	ALL	ALL	SAMPLE	ALL		
2004-2005	ALL	SAMPLE	SAMPLE	ALL	PILOT	PILOT
2005-2006	ALL	SAMPLE	SAMPLE	ALL	ALL	SAMPLE
2006-2007	ALL	SAMPLE	SAMPLE	ALL	ALL	SAMPLE
2007-2008	ALL	SAMPLE	SAMPLE	ALL	ALL	SAMPLE
2008-2009	Final Data Analysis and Reporting					

Data Sources for This Report

The national evaluation of the ECHSI started in October 2002 and continues until November 2009. Because this report comes at an early stage, many of the findings reported here are preliminary. The evaluation design includes both qualitative data (such as interviews and observations) and quantitative data (such as survey responses). Not all of the data sources planned to be used are currently available. Schools are still too new to provide some measures (e.g., achievement scores), and other data (e.g., course taking) remain to be collected and analyzed. This report references data collected between January 2003 and October 2004, which involved the following:

- The seven original intermediaries[3]: Two sets of interviews with key intermediary staff, once in 2003 and once in 2004.
- The 22 ECHSs (and 1 middle school preparatory program) associated with these 7 intermediaries and open during the 2003–2004 academic year:
  - One school-level survey completed by 21 of the 22 ECHSs, including details about their programs, students, and staff.
  - Site visits by the evaluation team to 12 ECHSs and 1 middle school program, where we interviewed school leaders, instructors, other staff, and students and also observed classes.
  - Telephone interviews with nine school leaders (at ECHSs not visited)[4].
- The next three intermediaries to receive grants[5]: One set of interviews with key intermediary staff, completed by October 2004.

Organization of the Report

The purpose of this report is to provide an initial description of the first 2 years of the ECHSI. Given the age of the ECHSI, it is too soon to answer all potential questions of interest. However, this early look at the initiative provides important details about how the schools were coming together, who was involved, who was enrolled, and how things were going. Chapter II descriptively explores the most basic characteristics of the first group of ECHSs, including, for example, types of students enrolled, types of staff, the prevalence of partnerships with 2-year versus 4-year institutions of higher education, and where the schools were physically located. Chapter III describes the degree to which ECHSs were starting to develop the attributes associated with successful small high schools that were outlined earlier in this chapter. Chapter IV moves into the classroom with preliminary descriptions of the curriculum and of the instructional techniques observed in some ECHSs. Chapter V steps back out of the ECHS to focus on the partners working to implement ECHSs and the policies that supported or inhibited their work. Chapter VI summarizes the status of the initiative and the evaluation as of the 2003-2004 school year and looks ahead to the evaluation work that will take place during the 2004-2005 data collection year.[6]

[3] Antioch University Seattle, KnowledgeWorks Foundation, Middle College National Consortium, National Council of La Raza, SECME, Utah Partnership, and Woodrow Wilson National Fellowship Foundation.
[4] We were unable to schedule an interview with any staff at one ECHS.
[5] The City University of New York, The Foundation for California Community Colleges, and Portland Community College.
[6] Throughout this report, references to specific ECHSs are pseudonyms.

Chapter II. Description of ECHSs

The Core Principles of the ECHSI and the key attributes of successful small high schools outlined in Chapter I provide the commonalities that link the Bill & Melinda Gates Foundation, JFF, the local partnerships, the intermediary groups, and the schools themselves. Mutual commitment to the principles and the attributes creates the initiative—multiple entities striving for common goals. Along with this central vision, however, the individual intermediaries and the networks of schools that they are helping to build have considerable latitude with design elements, the origins of the schools, the nature of the local partnerships, where the schools are located, and other characteristics. How these schools are alike and how they differ will provide an important analytic framework for understanding their successes and their struggles over the years of the evaluation.

This chapter focuses on the 22 ECHSs that were operational during the 2003–2004 school year or earlier. It provides basic descriptive data on the schools' characteristics, as these relate to the Core Principles and key attributes such as school size, as well as some basic data on the school types, partner institutions of higher education, the schools' physical locations, and their early staffing arrangements. Table 2 serves as a central reference point for several key characteristics that are discussed. Although this chapter is currently descriptive, future analyses will link some of these characteristics to student outcomes.

School Type

The 22 ECHSs were fairly evenly divided between new schools starting from scratch and existing schools that were adapting to exhibit ECHS features.

The two basic types of ECHSs are startups and adaptations. Startups are brand new schools, conceived and initiated as a result of the ECHSI. Adaptations are schools that already have opened but will be adapting into ECHSs. Most of the adaptation ECHSs were associated with one intermediary, the Middle College National Consortium (MCNC). Middle Colleges are high schools primarily located on community college campuses; some of them have been operating for more than 20 years. In the Middle College model, students may take college courses while in high school, but there is no principle pushing students to earn 60 college credits in a 4- or 5-year period. As an ECHS intermediary, MCNC is encouraging its network members to adopt the ECHSI Core Principles.

School Size

Small school size is a Core Principle of the ECHSI. In the ECHSI context, smallness is defined as about 100 students per grade. On average, in 2003–2004, ECHSs enrolled a total of about 160 students per school. As shown in Table 2, the smallest school (a startup) had only 26 students and the largest (an adaptation) had 505 students. Because many schools did not yet have all grades in place, total enrollment figures are somewhat misleading. On average, ECHSs enrolled about 68 students per grade, far lower than the suggested maximum of 100 students per grade, and many had only ninth-grade students in 2003–2004.

Table 2. 2003–2004 ECHS Characteristics

School Name*	School Type	IHE Partner Type	School Size (Total Enrollment)	Mean No. Students per Grade	Grades Offered 2003–04	School Primary Location
Alton	Adaptation	2-year	235	59	9–12	On an IHE campus
Birch Tree	Startup	2-year	65	33	11–12	On an IHE campus
Canyon Ridge	Adaptation	2-year	68	68	9–12	On an IHE campus
Carriage	Startup	4-year	251	126	9–10	Share with other school(s)
Central Avenue	Startup	2-year	80	80	9	In an office building
Community	Startup	2-year	134	67	9–10	On an IHE campus
Destination	Startup	4-year	69	69	9	Share with other school(s)
Frontier	Startup	4-year	87	87	9	Share with other school(s)
Heartfield	Adaptation	2-year	218	73	10–12	On an IHE campus
Highland Oaks	Startup	2-year	35	9	9–12	In own school building
Longview	Startup	4-year	96	96	9	On an IHE campus
Lytton Springs	Startup	2-year & 4-year	113	113	9	Share with other school(s)
Malvasia Grove	Adaptation	2-year	66	17	9–12	Share with other school(s)
Millstone	Adaptation	2-year & 4-year	213	53	9–12	In own school building
Nebbiolo	Adaptation	2-year	505	126	9–12	On an IHE campus
North Valley	Startup	4-year	31	31	9	In own school building
Sawtelle	Adaptation	2-year	287	72	9–12	On an IHE campus
Scholastic	Adaptation	2-year	450	113	9–12	On an IHE campus
St. Moritz	Startup	2-year & 4-year	84	84	9	In an office building
Tea Creek	Startup	4-year	26	26	9	Share with other school(s)
Walnut	Adaptation	2-year	104	26	9–12	Share with other school(s)
Wildwood	Adaptation	2-year	279	70	9–12	On an IHE campus

* All school names are pseudonyms.

Grades Offered in 2003–2004

As illustrated in Table 2, the ECHSs operational in 2003–2004 commonly enrolled only 9th- or 9th- and 10th-grade students (10 of 22 schools). Nine of the adaptation ECHSs enrolled grades 9–12. However, many of these schools were applying the ECHS Core Principles to their younger students while allowing older students to continue through high school as before. Of the remaining three schools, one startup enrolled grades 9-12 and one enrolled just grades 11 and 12,[7] and one adaptation enrolled grades 10–12. Next year, more ECHSs will offer the upper grades since many schools are scaling up one grade per year.

[7] This school will no longer be part of the ECHSI as of 2004–2005.

Middle-Grade Outreach

One of the ECHSI Core Principles is that in order to succeed as a blended and accelerated high school/college model targeting educationally challenged students, the local partnerships will have to somehow include middle schools to ensure that entering ninth-grade students are prepared to take on challenging course work. The data on the ECHSs operational in 2003–2004 indicate that none of the ECHSs actually enrolled students below ninth grade. However, one school did set up pre-ECHS programs in several middle schools to prepare students for ECHS enrollment (although these students still had to apply for entrance along with other students). A few other ECHSs had close partnerships with feeder middle schools.

Although middle-school outreach is a core feature of ECHSs, no ECHSs enrolled grades below ninth, and few had close relationships with middle schools as of the 2003–2004 school year.

Interviews with leaders and staff of the intermediary organizations made clear that these individuals understood the importance of middle-grade outreach that goes beyond simple recruitment of students to an ECHS. Some ECHSI intermediaries will be making it a requirement for the schools in their networks to "reach down" into the middle schools. A representative at FCCC explained that one of the stipulations in their application process is that ECHSs "demonstrate before they win a grant, how are you going to reach down into the middle schools. Some of them are actually thinking about making [the ECHS] start at seventh grade…If you want to be a 7–12 or even a 6–12 school, we encourage it." This intention was echoed by other intermediaries. School leaders at some sites were targeting students in even lower grades. At Walnut ECHS, school leaders felt that the seventh- and eighth-grade students came to them unprepared in mathematics and reading. They thought that they needed to "gear down" and target fifth- and sixth-grade students. One of the school leaders maintained that a key strategy for the success of an ECHS is "to partner with at least one middle school [to] start sixth graders into…knowing that they can choose…and [that] this is one high school that is an option for them."

IHE Partner Types

The ECHS model requires a local partnership between an institution of higher education and a school district or other entity legally authorized to operate a school. In 2003–2004, the majority of IHE partners were 2-year institutions.

As part of the ECHSI, all schools must partner with an institution of higher education. In 2003–2004, most of the operating ECHSs (16 of 22) partnered with 2-year public institutions (see Table 2). Of the remaining six ECHSs, five had partnerships with 4-year public institutions and one had a partnership with a 4-year private institution. Several of the ECHSs actually had multiple higher education partners. In these cases, one IHE was generally designated as the lead partner. In the multiple partnerships, all included a public 2-year institution. The overrepresentation of partnerships with 2-year institutions is interesting, considering that the original model ECHS was created by a private 4-year institution.

Several intermediaries have decided to partner exclusively with specific types of IHEs. For example, MCNC ECHSs were partnered exclusively with public 2-year institutions.[8] In contrast, WWNFF

[8] Although MCNC partnered with 2-year institutions in this sample of ECHSs, they have since started to partner with 4-year institutions also.

ECHSs were all deliberately partnered with 4-year institutions, both public and private. Because the MCNC schools represented such a large proportion (nearly half) of the ECHSs reported on in 2003–2004, the overall distribution of IHE partner types tips toward 2-year colleges. It remains to be seen whether this pattern persists as other intermediaries increase the number of operating ECHSs in their networks.

ECHS Locations

Given that the ECHSs blend educational systems, there are many possibilities for where a school might be located. In this section, we categorize these locations into four types and summarize the benefits and drawbacks discussed by ECHS staff and students during interviews.

Facilities Shared with Other Schools

Benefits of location
- Many resources already established (e.g., library, cafeteria, sports facilities).
- Transportation provided.

Challenges of location
- Difficulty sharing resources, conflict between students (and sometimes staff) at different schools.
- Long commutes.
- Poor condition of facilities and materials.

Seven ECHSs shared facilities with one or more other high schools. One benefit of these locations was that many of the resources and facilities needed for a high school were already present. The leader at Carriage noted, "Overall, for us to be located in a traditional high school has helped our school. …We have access to their library. We have access to their school lunch program."

However, co-location with a conventional high school was also the source of many complaints. One co-location issue noted by ECHS leaders was difficulty in sharing facilities and equipment among multiple schools. As one leader at Lytton Springs stated, "We always feel like we're visitors or guests." The challenge presented by sharing space led to some conflicts between students in different schools within the same building. Students at two ECHSs within comprehensive high schools noted that the students from the larger high school "jumped all over" them or were mean to them. Another issue with sharing a high school facility has been the quality of the facilities in these usually aging, large public school buildings. One observer to a class at Lytton Springs noted that "the students continually turned the air conditioner on and off—a balancing act between distracting noise and uncomfortable air quality." Some schools, such as Carriage ECHS, have renovated their spaces. However, others have not yet had the opportunity to improve their surroundings.

Benefits of location
- Can facilitate connection between HS and IHE faculty.
- IHE students can serve as role models to HS students.
- HS students practice being "college students."
- Adequate (and sometimes "state-of-the-art") materials and resources available.
- IHE courses on-site.

Shared IHE Campus

Ten ECHSs were located on an IHE campus in 2003–2004. Nine of these schools were affiliated with MCNC, an intermediary that requires its schools to locate on a college campus.[9] Some preliminary research has demonstrated that placing blended-model high schools on college campuses contributes to positive student outcomes (Cavalluzzo, Jordan, & Corallo, 2002). For all of these locations, the administration felt that being on the IHE campus was an important part of the school structure by strengthening the

[9] The 10th MCNC ECHS was located in an office building while a facility on the college campus was being completed.

connection between the two faculties, providing ECHS students with college role models, and making it easier for students to imagine themselves as successful college students.

In general, there were few complaints about the facilities at the ECHSs on college campuses. A leader at Birch Tree ECHS raved that students "have access to the full resources of the college…Our kids really do use the entire campus. The campus itself—you would need to envision—has a $60-million brand new facility…We're very lucky that the college has been really generous with our students' use of it."

Challenges of location
- Space originally intended for other purposes.
- IHE uses had first priority.
- Some IHE students resented presence of HS students.
- Students usually required to arrange own transportation.
- Long commutes common.

Yet some ECHSs did not have all the needed facilities. For example, Community ECHS had no cafeteria or outdoor facilities, and several buildings did not have restrooms. Birch Tree ECHS had access to "state-of-the-art science labs," but these spaces were not suited for high school biology and chemistry. Canyon Ridge ECHS was located in a converted automotive shop that, the leader said, "does not really lend itself to our purposes." Because the IHEs must make their college students the first priority, ECHSs negotiated their own access around college needs. Students at Community ECHS complained, "We don't get to use a lot of the stuff, like the basketball courts. It's harder to get permission to use them through the college, and if we do, we have to go with the schedule of the college…We don't have any other playing area."

ECHSs in Office Buildings

Benefits of location
- School was able to open.

Challenges of location
- Missing many school facilities (e.g., gymnasiums, cafeterias, laboratories).
- Crowded.
- Materials not in great shape.
- Students required to arrange own transportation.

Only two ECHSs were located in a noneducational setting, both in office buildings. The main benefit of these facilities was that the settings at least allowed the schools to open while continuing to look for or wait for more appropriate spaces to become available. The primary issue in these spaces was the missing infrastructure to support a school. They lacked gymnasiums, cafeterias, and outside spaces. A student at St. Moritz ECHS said, "Sometimes I want to be back in the eigth grade because you can go outside and there's such an open space." At Central Avenue ECHS, students ate delivered boxed lunches in the classrooms. The other problem with the office buildings was that the spaces were too small, both overall and in the configuration of the instructional space. Both schools' leaders were concerned about the space constraints as the schools continue to grow. In both schools, classrooms will have to be divided to accommodate two classes at a time, and already crowded hallways will be even more congested. Some students will have to share lockers, and even bathrooms will be a valued commodity. One student at Central Avenue ECHS worried about the following year, saying, "It's gonna be hard here next year. There are gonna be more fights because the hall is so small. We're gonna have to share lockers and share classrooms. You can hear the other teachers through the walls. It's gonna be hard for us. There are only two bathrooms with three stalls. It will be crazy."

Despite the numerous complaints, the future is not necessarily bleak for these sites. One school will be in the office building only until the IHE partner completes a new building, where one floor is

being set aside for the ECHS. It is also possible that, over time, the other school will be able to acquire more space to develop additional facilities. As an example of this kind of approach to facilities, one adaptation school that opened many years ago developed a site that was originally a mental health facility. It is now an adequate school campus that continues to add school facilities. Finding appropriate space is a problem that charter schools have faced all over the country, and the ECHSI community might look to this sector for policy and finance solutions, such as revolving capital improvement loans from state governments or nonprofits.

ECHSs in Own School Building

Benefits of location
- Facilities designed to meet secondary school needs.

Challenges of location
- Few extracurricular activities because of school size.

Three ECHSs were housed in their own school buildings (including the ECHS on a former mental health facility site mentioned above). The main benefits were that the facilities at the site were designed to serve secondary school students and remained dedicated to the ECHS students' needs. In fact, few complaints emerged from students or staff about these settings.

ECHS Students

One of the most important Core Principles of the ECHSI relates to the characteristics of the students served. As defined by the foundation and articulated in initiative documentation, all ECHSs should enroll students underrepresented in postsecondary education, including "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). According to our survey data, most ECHSs went out of their way to attract the students the foundation seeks to serve.

Recruitment and Selection Strategies

The first steps in enrolling the target student population are to (a) find ways to inform the population about the school and (b) set up selection procedures that align with the ECHSI vision.

ECHSs used a variety of strategies and several communication channels to recruit students into ECHSs. A majority of ECHSs worked with middle and high schools to recruit students. Examples of particular activities included presentations to students at local middle or high schools and the distribution of informational materials to these schools or through mailings. Half of the ECHSs used local community and outreach groups to target particular populations for recruitment. A very small number also used the local media to advertise their schools in the newspaper or on the radio. More than one-third of the ECHSs used multiple strategies to recruit students. The average acceptance rate in 2003–2004 was 70 percent, and no schools reported difficulties filling the classes. One startup ECHS did no recruiting and received 10 applicants for every space available. This school had an unusually high application rate because families in the area were familiar with the affiliated charter middle school.

Typically, ECHSs used particular criteria to select students from the applicant pool, though these criteria and their level of specificity varied. About one-third of the schools had criteria for targeting students with specific demographic characteristics, such as Native American students, English language learners, or low-income students. Nearly as many schools outlined various behavioral or motivational criteria, including few disciplinary problems and being drug free. On the other hand, one school actively sought out students who had exhibited behavioral (and academic and social) problems. Nearly half of the schools cited academic considerations when asked about their selection criteria. However, two of these schools targeted students who had dropped out of school or exhibited academic problems. In addition, four schools relied on a lottery to select students randomly, though three of them conducted some screening before the applicant pool was finalized.

Demographic Characteristics of Enrolled Students

Generally speaking, the ECHSs included students from underserved populations in proportions similar to or greater than those in the surrounding populations, meaning that ECHSs were targeting underserved students. On average, 80 percent of ECHS students were from racial and ethnic minority groups, and almost 70 percent were from low-income families. In general, the proportions of ECHS students from minority backgrounds approximately equaled or exceeded their proportions in the local feeder districts. For example, one Antioch University–supported ECHS in Washington enrolled 98 percent minority students, compared with only 22 percent minority students in the local district. The same pattern holds for the percentage of students eligible for free or reduced-price lunch (a proxy measure for poverty). All but six ECHSs enrolled a majority of students eligible for free or reduced-price lunch. The proportion of enrolled students with special needs, however, was lower in ECHSs than in the local districts for almost every school.

ECHSs enrolled under-represented students, an ECHSI Core Principle. Some schools sought students with academic and social difficulties.

According to survey data, some ECHSs required an application process with several steps. Others, by local or state policy, were required to use a lottery if there were more applicants than seats available in the school. Some early evidence suggests that the ECHSs with the most rigorous enrollment criteria also enrolled fewer traditionally underserved students than would be expected, given the local student population. This is an area that the national evaluation will track carefully in the future. (For more information about recruitment and enrollment in the ECHSs, see *Early College High Schools: Early Recruitment and Selection Strategies,* available at http://www.gatesfoundation.org)

Tension between Enrolling Target Population and Academic Success

ECHSs recruited and enrolled students from groups who are traditionally underserved by the school system and who usually do not have the opportunity to attend college. Many of these students have not had the academic opportunities and experiences to prepare them to succeed in high school, let alone college. Therefore, it is not surprising that ECHSs face many challenges providing an accelerated education to students who exhibit significant academic difficulties.

Success in recruiting underserved students amplified challenges in moving students successfully through a rigorous high school and college curriculum, and is an essential tension within the initiative.

Many entering students lacked solid reading, writing, and math skills, as well as presentation skills, that they needed to succeed in classes. In interviews, intermediary staff, school leaders, and teachers were concerned about their students' low levels of academic skills, some as low as the third grade. For example, the leader at Community ECHS stated, "Being that we are accepting students who are not necessarily average or above in terms of their performance on standardized tests, we have some students who are in need of extra time on assignments or extended time, or they may need tutorials. So we really try to adjust to the students we have and meet their needs rather than going out and truly trying to just select the cream of the crop." ECHS instructors were also concerned. An instructor at one school stated, "Right now, they need to be preparing for their [state subject matter] exams…If they fail that exam, they are not going to be interested in progressing further. That is why I would like to see more on their basic skills because they need to do well." Instructors and school leaders at several ECHSs pointed to the challenges of providing these incoming students the opportunity to experience at least 2 years of college while at the same time needing to do remediation. An instructor at Walnut ECHS noted:

> The challenge has been this year that many of the students are coming in the door in need of a certain amount of remediation, and we're putting them into an accelerated math program to get college credit. The program feels like it's wearing two hats. It's an accelerated remediation program, in that weird sense. Some kids were put in over their heads, and at the same time we've made promises of college credit at the other end to others, so we're trying to serve two distinct populations, and that's unfair to both.

Another concern expressed by some of the school leaders and instructors was that the curriculum would have to be watered down if the students' skills were not up to par. A high school instructor who was teaching a college-level class stated, "It's been a challenge to keep the curriculum as demanding as a college class should be and still get people involved." The ECHS students have been scoring at low levels on the college readiness tests, and grading these students can be challenging. A school leader at Millstone ECHS questioned whether high school students should be graded by the same standards as college students; if so, he felt that it would be a problem. A school leader maintained that the students must take the college readiness test and felt that "If they are going to get through this rigorous program, they have to be treated like—and get grades like—the college students. And that caused a few of them to get Ds and Fs."

As time passes, pressure will mount for ECHSs to demonstrate strong academic outcomes for their students. If these schools have been struggling to obtain the desired outcomes with their enrolled students, they might be tempted to either change the entrance requirements to select a more prepared group of students or lower their expectations for students. The evaluation will certainly track ECHSs over time to determine whether schools start to select academically better-prepared students.

ECHS Instructional Staff

The survey administered to the ECHSs in 2003–2004 asked respondents to report on their staffing. Not surprisingly, given the early implementation status of many of the schools, staff size was often very small.

ECHSs have been successful in attracting the basic instructional staff that they needed during the early phase of implementation. Most did not yet have the enrollment to allow hiring of specialized personnel.

One indicator for the level of academic support available to students in ECHSs is the number of instructors in relation to the number of students. The median student–teacher ratio was about 16 students for every full-time high school instructor.[10] Despite national and state concerns about teacher shortages, particularly in mathematics and science (see Achieve, 2004; Damico, 2004), few ECHSs reported problems filling their instructional positions. Several schools noted that they had several hundred teachers apply for a few positions. Most schools had affiliations with school districts and relied on the districts' established procedures for teacher recruitment. Other ECHSs had fewer choices, hiring some teachers who did not support the ECHS vision. In these cases, the leaders generally reported that they were able to counsel the instructors out of the positions and were not concerned about finding replacements.

In some places, teacher unions limited some of the ECHSs' flexibility to choose instructional staff, but the schools were also creative about maneuvering around union rules. One intermediary reported that, despite strong teacher union contracts in the state, appropriate staff could be recruited if sites "make the expectations to teachers clear up front, and basically scare away the lazy ones and…ones who really aren't going to be a good match." Longview ECHS negotiated an agreement with the teachers' union to waive the role of seniority in staffing decisions so the leader could hire and fire at will.

Several adaptation ECHSs had difficulty finding staff interested in transferring to this new type of high school. At Millstone ECHS, there was a high rate of teacher turnover in two key academic departments. The school hired less experienced teachers who were more flexible in their approach to instruction. At Walnut ECHS, teachers volunteered to work in the ECHS program, but some teachers who did not volunteer were placed in the program to fill positions. A few of the teachers who did not choose the program seemed skeptical of the ECHS goals.

The ECHS Core Principles document states that ECHS teachers should be "certified in their fields or have attained mastery of their academic disciplines" (JFF, 2002). Teachers in ECHSs generally appeared to meet these criteria. Many high school teachers had received master's degrees, while others reported working toward master's degrees. In addition, all interviewed teachers reported being certified by the state or in the process through alternative certification programs. Most teachers held certifications in their fields. Several teachers have received National Board Certification from the National Board for Professional Teaching Standards. One school partnered with the National Board to train all teachers in the ECHS to become National Board Certified Teachers; another school applied for membership with a nationwide certification program. The national evaluation will continue to investigate the subject area qualifications of ECHS instructional staff.

Although most ECHS leaders felt that *filling* positions was not a challenge, it was challenging for those hired to fulfill all of a school's needs. Several ECHSs had few course offerings because there

[10] The mean student–teacher ratio in ECHSs, based on full-time high school instructors, was about 23. However, the mean is misleading for these data because one outlier raises the ratio significantly. This one ECHS had only one full-time instructor, but other part-time staff were available. The median provides a more accurate summary.

were too few instructors to cover the courses. This was particularly a problem in the smallest ECHS, where one full-time instructor and several part-time instructors covered all the academic areas for four grade levels.

Other ECHS Staff

Classroom instructors will clearly be at the heart of whether ECHSs ultimately succeed in helping students achieve the goal of high school graduation and 60 units of college credit. What happens in the classroom will not be enough, however. As unique "outliers" within school districts or as charter schools without a district affiliation, these schools require strong, savvy leaders who can ensure that they obtain all the resources to which they are entitled and who can advocate for the ECHS model and its goals. As the schools grow and resources increase, ECHSs will be able to diversify their staffing to include special roles for supporting students' academic, social, and civic development. This section reports on the basic status of leadership roles and the prevalence of noninstructional staff in the ECHSs as of 2003–2004.

School Leaders

Some staff felt that ECHS leaders were spread too thin.

Of the 21 ECHSs reporting data on leadership, 17 schools had a full-time, primary leader (and one of these had two full-time leaders). The remaining four ECHSs had a part-time leader or had a leader available through a larger high school in which the ECHS was housed. Although instructors appreciated the efforts at ECHSs to focus the 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. To gain extra assistance, some leaders delegated tasks to others. At Destination ECHS, one teacher also served as the assistant principal. At one adaptation ECHS, the leader added a new position of grant facilitator and felt that the division of labor worked well because "a principal cannot do the principal's job and run the grant."

Academic and Social Support Staff

Instructors filled in for missing support staff, a role for which some instructors felt unqualified.

Particularly important in working with underserved students is having staff members who can provide additional academic and social support. Only 3 of 21 ECHSs had a full-time instructional coordinator, although an additional 11 schools had a part-time person in this role. More than half of the ECHSs had at least one full-time guidance counselor. This number is due largely to the presence of guidance counselors at MCNC ECHSs; all of these schools (that reported data) had at least one guidance counselor working full-time. In terms of additional support staff, such as nurses, psychologists, speech pathologists, or social workers, eight ECHSs had at least one full-time staff member, and an additional eight had at least one part-time staff member available.

As a result of the scarcity of academic and social support staff, existing staff had to cover multiple roles, or, as one leader said, "Everyone has to take on more hats." Because the ECHS students had so many challenges, teachers were often called on to help with nonacademic needs. Alton ECHS expected all teachers to play multiple roles. An instructor there said, "All of the teachers are called

upon to be counselors as well. If students' basic needs are not being met, it's up to teachers to help fill the gaps." Usually, these instructors did not have formal training to serve in this capacity. As one teacher said, "The teaching part is easy. But the coordinator, counselor, parent, lawyer, whatever the many roles I take, that's the tough part."

It will be interesting to track the staffing patterns at ECHSs over time. As schools grow, they may add academic and social support staff, or they may focus on adding instructional staff. Alternatively, the ECHSs may find that such specialized functions can be more effectively fulfilled by contracting with a school district or a social service agency. Given the challenge of working with underserved students, an important feature of ECHSs may be the presence of staff focused on supporting students academically and socially.

Summary

This chapter has provided an initial descriptive look at the first 22 high schools in the ECHSI, including basic characteristics such as enrollment size, where they are housed, whom they are serving, how they are staffed (so far), and other key parameters. The early evidence is that these schools are in the process of becoming small, autonomous high schools serving populations that are underrepresented in higher education. Having few students and targeting underrepresented students are key constructs of the initiative's strategy. Each school has developed through a partnership between an IHE and a school district or other entity, again a key component of the ECHSI. In general, the schools seemed to be adequately staffed, given the grade levels served so far. However, two variables described above suggest some challenges. One challenge is reaching middle school students in a significant way to ensure that ninth graders are prepared to start in the ECHS immediately. This is a Core Principle of the ECHSI and will no doubt be addressed more assiduously as schools mature. The other area that is challenging many of the schools is facilities. Currently, a number of the ECHSs are not adequately housed, and their space problems are likely to increase as they grow.

Chapter III. Attributes of Effective High Schools

Several themes have emerged across the ECHSs relating to attributes of effective high schools. The theory of change that underlies the foundation's high school grant activities posits that high schools that offer high-quality educational experiences for all students share a set of common attributes. Although the ECHSI's Core Principles are the primary drivers of Early College development, the more generalized attributes of effective high schools, as put forth by the foundation, have emerged as indicators of effective ECHSs as well (AIR/SRI, 2004). These attributes have been a consistent goal in all of the foundation's high school reform work. The attributes include:

- **Common Focus.** Staff and students are focused on a few important goals. The school has adopted a consistent research-based instructional approach based on shared beliefs about teaching and learning. The use of time, tools, materials, and professional development activities are aligned with instruction.
- **High Expectations.** Staff members are dedicated to helping students achieve state and local standards; students are engaged in an ambitious and rigorous course of study; and students leave school prepared for success in work, further education, and citizenship.
- **Personalized.** The school is designed to promote sustained student relationships with adults where every student has an adult advocate and a personal plan for progress. Schools are small. There is an emphasis on responsible behavior and mutual respect in a safe and ethical atmosphere.
- **Respect and Responsibility.** The environment is authoritative, safe, ethical, and studious. The staff teaches, models, and expects responsible behavior and relationships are based on mutual respect.
- **Time to Collaborate.** Staff has time to collaborate and develop skills and plans to meet the needs of all students. Parents are recognized as partners in education. Partnerships are developed with businesses to create work-based opportunities and with institutions of higher education to improve teacher preparation.
- **Performance-Based.** Students are promoted to the next instructional level only when they have achieved competency. Students receive additional time and assistance when needed to achieve this competency.
- **Technology as a Tool**. Teachers design engaging and imaginative curriculum linked to learning standards, analyze results, and have easy access to best practices and learning opportunities. Schools publish their progress to parents and engage the community in dialogue about continuous improvement.

This chapter examines these attributes, organizing the discussion under headings that are important to the development of ECHSs. The chapter also provides teachers' and students' perspectives on how these attributes have affected their ECHS experiences.

Professional Climate

When ECHSs develop a supportive environment for staff, they develop a climate in which faculty feel they have the resources to support their students. This positive climate comes, in part, from three aspects of the instructional work environment. Instructors need time and space to work

together to support students and each other. Teachers need targeted and effective professional development that helps them grow as professionals. Finally, leadership structures that value the expertise of faculty by including them in decision-making roles help create a positive professional climate. These aspects of the school climate are discussed below.

Professional Community

ECHSs had or had started to set up activities to develop strong professional communities. In most ECHSs, however there was little evidence that the IHE instructors viewed themselves as part of the ECHS professional community, and few reported receiving training on instructing high school students.

Building an effective professional community characterized by strong collaboration and mutual trust and respect among all parties has been a major goal of ECHSs. This attribute of effective high schools rests on a body of research conducted over the past 15 years that links successful high school reform to contexts that foster collegial relationships and shared problem solving (see, for example, the essays by Little & McLaughlin, 1993). Evidence of strong communication and collaboration among staff members existed in many of the schools.

Teachers reported seeking out other teachers for assistance, ideas, brainstorming, and curriculum development. For example, a leader at St. Moritz ECHS said, "We have teachers working together to make sure there is a common vocabulary spoken in their classes." A teacher echoed the collaborative atmosphere and said, "We definitely try to implement what we talk about. We try to work together, and I've never seen that before." Teachers spoke of the importance of working constructively and collaboratively to address their problems. A new teacher at Community ECHS found the community very supportive: "It's so funny. A lot of teachers will say, 'Hey, I'm new, what should I teach? and everybody all of a sudden just sends all these lessons. So there's this really great support system, which makes it really marvelous." Talking about the close-knit faculty at Alton ECHS, one teacher said, "I find the faculty is a family. We cry when someone has a loss and feel safe and within a family." However, some ECHS instructors also expressed frustration with feeling that all faculty were not equally committed to the work. One teacher said, "When I [began teaching in] this school [I realized] you do need to work harder…You can't just go home and not think about school…I don't feel like we're all working hard. We're not with the same mentality on that. I'm not here to make my job easier…I'm here to meet the needs of the students."

Another crucial component of building an effective professional community is the relationship between college and high school faculty. Canyon Ridge ECHS has made great strides in this regard. According to the leader at Canyon Ridge, "There is a lot of communication between the high school and the college faculty. If any [college] instructor has a problem with our students, he just picks up the phone and tells us about it, and we deal with it immediately." In some cases, ECHS faculty accessed IHE resources for professional development. In a few cases, faculty from the partner IHE mentored the high school faculty and assisted them with developing their curricula and teaching strategies. Building the relationship between college and high school instructors, however, was not without its challenges. Although ECHS staff said that college instructors were invited to participate in ECHS gatherings and meetings, very few did. Further, college faculty were usually not included in professional development opportunities.

Professional Development

Building an effective professional community requires that the instructors have the skills to succeed in their work. Professional development at ECHSs came in a number of forms, including school inservice, workshops (both summer and weekend offerings), staff retreats, and national conferences (such as the MCNC conference held annually and meetings organized specifically for the ECHSI). Topics for professional development included teaching college-level classes for high school students, understanding poverty, student academic and social support, using computers and technology with instruction, behavior management, building trust in student–teacher relationships, and the guiding principles of the ECHS Initiative. Professional development topics that teachers felt were missing included the development of curriculum, team teaching, leadership development, and heterogeneous grouping of students with diverse ability levels.

Many schools made explicit arrangements for instructors to teach each other. St. Moritz ECHS leadership believed that "some of our best professional development can come from our own staff"; as a result, a math teacher was planning a program for the entire math department. As one Community ECHS teacher commented, "When I was at [my old school], I'd come out of those professional development meetings, I just wanted to scream, because they were just so horrible. But five or six of us sit down here, and we discuss things, and one of us presents something, and it's enjoyable actually, and we're learning things, and we're helping each other." This type of sharing can be difficult to harness. As one teacher remarked, "If you get a bunch of teachers from all different disciplines together and you don't have good leadership and you're not told to work on interdisciplinary stuff and come up with specific plans, it makes for a hodgepodge of clichés." Other teachers expressed the view that the meetings were "reinventing the wheel" and were an inefficient use of their time.

Shared Decision-making

ECHSs may eventually become professional communities where shared decision-making strategies can make teachers feel more invested in the school. There are already indications that teachers have substantive input. Teachers tended to cite examples of freedom to make decisions regarding curriculum and shared responsibility around disciplinary issues. Several teachers mentioned an increased sense of ownership and responsibility at the ECHS, compared with other schools where they have worked, due to the level of shared decision-making. Most schools had some structures that allowed for teacher input, such as weekly staff meetings, although those meetings varied in quality, depending on the amount of time allocated and the expertise of the facilitator. One particularly forthright school leader spoke about how much meetings had improved with the help of a facilitator (provided by the intermediary).

In 2003–2004, however, most ECHSs focused on launching their instructional programs rather than on sharing decision-making authority. Thus, teachers tended to be concerned with matters of autonomy around curriculum—"How much latitude do we have with curriculum? Should we go with this curriculum or with curriculum provided by the district? There is discrepancy among teachers in the schools as to whether they feel they have latitude." To the extent that they commented on decision-making issues at all, teachers noted problems with the management structures. A teacher at one school felt that the ECHS staff met frequently and for sufficient periods of time each week, yet the decision-making structure in the school was "a work in progress."

Personalized Environment

Students almost universally mentioned the personalized environment as a benefit of their ECHS. Teachers said that this personalization assisted their work with students and in engaging parents. It also helped to keep schools safe.

One of the unifying features of all high schools supported by the foundation, including ECHSs, is their small size. With fewer students in the school, teachers have the opportunity to get to know the students and their families. Parents or guardians can alert instructors to student needs and reinforce lessons from school at home. Once faculty get to know their students, the personalized knowledge can be invaluable. Staff can use this information to build on students' strengths, address students' weaknesses, and engage them in the education system. More practically, with fewer students, staff have a better chance to keep the high school a safe place for students, both by knowing students well enough to know when something is wrong and by having enough staff to enforce school rules. The following section focuses on schools' development of personalized environments through personalized instruction, safe and orderly environments, and parent engagement.

Personalized Instruction

The establishment of a small, personalized educational environment was one of the most commonly identified positive traits of ECHSs. This attribute appeared to be tangible immediately upon schools' opening and important to both the students and staff.

ECHSs used a number of strategies to create and maintain personalized environments. At Central Avenue ECHS, teachers will move with students as they progress through grade levels, hopefully facilitating the development of a long-term rapport and relationship between teachers and students. "We're gonna be close with the same teachers for 5 years. I like that," said one of the students. Another strategy is to keep class sizes small, so that teachers are available to provide individualized attention to the students. Some schools provided individualized learning plans for all of their students. Some schools also had advisories devoted to providing a forum for students to talk frankly and establish trust with their teachers and advisors. Some teachers found they had time to devote to personalizing instruction because students were gone taking IHE courses for part of the day. As one Community ECHS teacher stated, "Because they're spending time in college classes, we as teachers have a little bit more time to do prep work and to be able to give them individualized attention."

The establishment of a more personalized learning environment has had a number of positive outcomes. Teachers felt that the environment helped them to develop stronger relationships with students, which led them to feel more accountable for their students' academic achievement. This connection was a new experience for some teachers, as noted by a Longview ECHS teacher: "When I first started teaching, I was told that it was wrong to be personal with students because of the legalities of sexual harassment…I was very standoffish with my students. This experience taught me that it is okay to be personal with them." Staff also felt they were seeing a positive impact on the students. The guidance counselor at St. Moritz ECHS said, "I've seen some students really grow. On the first day, my group was really polarized…I've really seen some of the boys start to be more sensitive, thinking before they speak so they are not laughing or mocking anybody—and I've seen girls start to express their opinions more because they are starting to feel more safe."

Students also remarked on the benefits of the personalized environment. Many students saw their teachers as truly dedicated to helping them improve. Students said their teachers knew them by

name and even knew them well enough to try to read their moods and understand their individual situations. Students also cited examples of teachers' going above and beyond their teaching responsibilities. A Walnut ECHS student said, "If you're struggling in one class, they'll talk to the teacher…If you don't have much money for lunch, the teachers will cover you." There was a general acknowledgment that ECHS faculty paid attention to student achievement and sought out struggling students to provide extra help. Students also felt that their voices were heard. Teachers at St. Moritz ECHS involved students in decisions about the curriculum. Students remarked, "I've been asked by teachers if I think certain projects are good enough for the class. They get my perspective. And I'll give them my opinion…We create our own unit, and that shows they respect our opinion." While most students agreed that they had strong relationships with ECHS instructors, students also acknowledged that their relationships with IHE faculty were much less personal. For example, a student at Millstone ECHS said that IHE instructors were available only during class time.

Even some students' criticisms are actually evidence for the strength of the personalized environment. For example, students who wanted to keep a low profile were having a hard time doing so. Some students felt that ECHS faculty could sometimes be too involved, bossy, or overprotective. A St. Moritz ECHS student said, "Even though they say they care about you, sometimes they care a little too much about you." Students said that because of their relationship with teachers and faculty, they could not get away with behavior that they could at another school. The overall impression gained from both students and adults at the ECHSs was that staff were successfully engaging students even when students did not want to be noticed.

In spite of the generally positive comments from faculty and students, the deeper personal connections were not always easy or welcome. Although ECHS teachers spoke largely of the benefits of personal relationships with students, some instructors felt that they learned more information than they wanted (e.g., about sexual abuse or violent home situations). Instructors found dealing with that information difficult. The level of support needed by some students may require that ECHSs both provide specific training to enable teachers to support students and develop strong connections with community support services for situations beyond their capacity.

Safe and Orderly Environment

As another benefit, a personalized environment appeared to facilitate a safe and orderly environment at school. One Community ECHS student remarked, "At my old school, the only way a teacher knew you is if you got in trouble…Here you don't need to be bad to be known." Students perceived the small school size as promoting a safer school environment because students at the school chose to be there and everyone knew each other. Students and teachers also cited strict school rules, such as zero tolerance for misbehavior, dress codes, and expulsion, as contributing to a safer environment. Some schools also provided social services that supported students in need of assistance before they became a threat. Particular to schools on IHE campuses, these students felt that they were safer on a college campus. One Community ECHS student said, "What I like best about the school is probably the environment…It's on a college campus, so there are no bad influences around."

Although many schools have succeeded in creating safe learning environments, some schools that were located on larger high school campuses struggled with safety and discipline problems. Several of these schools were located in dangerous neighborhoods. In addition, a number of teachers felt that students had too much voice in the discipline process and were not always held accountable.

ECHSs are definitely interested in having students quickly develop responsibility for themselves and respect for others. However, some adult comments such as these suggested a desire for more structure and authority, particularly for 9th grade students.

Parent Engagement

Parent (or guardian) engagement is an important part of school success because parents have the greatest opportunity to influence students. Regular communication with parents assists instructors in understanding and building a rapport with students and can lead to parents taking a more active role in their children's education. "I think that home visits worked the best…the kids whose homes I visited, I have built a bond with, and they come up and talk with me more than the others do," said a teacher from Longview ECHS. Some schools engaged parents by offering social supports. At Millstone ECHS, some parents attended General Educational Development and English as a Second Language classes. At one site, ECHS preparatory programs hosted "parent cafes," which are sessions to teach parents skills for preparing their children for college. A teacher from Community ECHS noted the impact of such engagement at one of these small schools: "I had over 20 sets of parents that came to see me last night, and I had met most of them already. I know them by sight, so there's a lot more involvement." Of course, not all parents can be engaged. Time, transportation, child care, and motivational constraints impeded engagement at times. The bottom line is that high schools have traditionally had less success than lower grade levels in involving families (National Association of Secondary School Principals [NASSP], 2002). Therefore, the work continues as ECHS staff develop new strategies to engage parents. As one Millstone ECHS teacher remarked, "Yesterday I called 24 [parents.] And I will guarantee if I get 2 responses, that's a lot…I guess the next step is to go knock on doors."

Academic and Social Supports

Many ECHSs, particularly adaptation schools, developed supports for students. Yet, some support activities were too informal or poorly attended to have dramatic impacts, and some schools put off setting up programs.

When students enroll unprepared for the academic and social demands of high school, ECHSs must develop extensive systems of support so that students can learn the full range of skills that will allow them to succeed. A school leader at Malvasia Grove ECHS commented on the supports needed by students: "Their skills here are not very strong, so we really need to do a lot of prep work, a lot of remedial work, and then get them engaged so that they will be able to do the rigor of college work."

Many of the adaptation ECHSs had programs in place. These programs included evening, weekend, and summer tutoring sessions in academic areas; courses focused on study skills; and "advisories," the goal of which was to have students connected to at least one adult in the school (see Figure 4 for more details on advisories). Startup ECHSs also began to implement these same types of support activities, although they were not as established or numerous as the programs at adaptation ECHSs. All these activities are an important feature to monitor, since research has documented the benefits of providing supports (e.g., higher level of persistence, stronger academic performance) to students who may be inadequately prepared, academically and emotionally, for college-level work and learning (Howell, 2001).

At both startup and adaptation ECHSs, staff noted that some of the formal support programs still needed improvement. Several areas where ECHSs attempted to provide supports appeared

understaffed or disorganized. Some ECHSs did not have formal programs in place. These ECHSs usually offered some tutoring for students, usually informally on a case-by-case basis. Nevertheless, schools were starting to recognize the importance of established programs to enable students to be successful in rigorous courses. Several schools indicated that a tutoring program would be implemented for the 2004–2005 academic year. However, it might take some time for schools to develop the balance of programs that will be most beneficial to students. One teacher said, "What is available and what is used are two different things," pointing out that there remained "a disconnect on this particular issue" between the teachers and students.

Figure 4. Introduction to Advisories

Although few comprehensive and methodologically sound research studies have considered the effectiveness of advisory programs (also called advisements, houses, or focus groups), some research does support the benefits of advisory program participation (Galassi, Gulledge, & Cox, 1997; National Middle School Association [NMSA], 1996). According to NMSA, the benefits of student participation include:

- Promoting student–teacher relationships
- Addressing self-esteem and competence beliefs
- Mediating between academic and social concerns.

Many school leaders believe that to be successful in a rigorous high school and college curriculum, underserved students need significant individual or small-group advisement. NMSA (1996) describes advisory programs as an arrangement whereby one adult and a small group of students have an opportunity to interact regularly in a caring environment. The time should be used for academic guidance and support, administrative details, recognition, and activities to promote citizenship. The goal of an advisory program is to have every student known by a staff member and to have that adult serve as the student's advocate.

In several schools, advisors closely monitored students' work on a daily basis, typically meeting students in morning seminars to assist them in preparing for their college courses later in the day. For example, at one ECHS, the principal noted that through the seminar, "every single day, someone is asking [students], 'How is it going?'" The principal also noted that the seminar had been "essential" for the students and gave the staff an opportunity to prevent students from making bad decisions.

The principal of another ECHS commented that the seminar provided support not available to many students:

> What we are providing the students is the stuff that middle-class parents provide their kids around the dinner table. It has to do with how do you negotiate with a professor, how do you find out what assignment you have missed, how do you look at a textbook and understand how a textbook is formulated.

This principal further noted that a seminar teacher "[makes] the implicit rules of college explicit and gives students tools and strategies for tackling their frustrations."

College-Going Culture

High expectations for all students, although generally evident among high school instructors, were less evident among IHE faculty. There was some evidence that faculty at 4-year IHEs had difficulty believing that the ECHS students would succeed in many college courses.

One of the fundamental principles of the ECHSI is the creation of schools that expect all students to attend and complete college. Thus, a major implementation goal for each school is the development of a college-going culture that keeps everyone within it focused on this outcome. Embedded in this goal is the notion that everyone associated with the ECHS will have high expectations for all students. In other words, the general expectation is that not just some students will take some college courses, but all students will take enough college courses to receive an associate's degree and the skills to continue for a 4-year degree. Many ECHS staff, from leaders to teachers, worked to establish a culture of high expectations. The language used by faculty describing their goals for students (e.g., that students "must move on—high school is not the limit") suggested high expectations for students' futures. As stated by Alton staff, the ECHS has one goal for students: college completion.

ECHSs also took concrete steps to demonstrate their expectations for students. Several ECHSs invited members of the business community to speak to students and talk about how they made it through to college and how college affected their career paths. College students themselves served as inspiration. The St. Moritz ECHS guidance counselor mentioned, "Getting kids from local colleges who are freshmen to come talk to the kids about college, what getting in is like and about the application process, is important because they really have no peers to look to." Many ECHSs integrated college tours into their programs (see Figure 5 for an example). An important feature of some ECHSs is their location on an IHE campus. The designers of these schools hoped that by being located on a college campus, students would think of themselves as "college material." All these features were designed to make it clear to students that each one of them was being prepared to attend college.

Teachers also integrated preparation for college into their daily instruction as a way to promote a college-going culture. In one class, students did research on colleges, and one student commented that more of this type of activity should be done in the future. In courses, teachers explained that what they were teaching was what students needed to know for college. A physics teacher told her students, "When you're in college, you will have to read things that you don't agree with. In a college situation, you might receive four articles about the same topic, so it will be important to identify this information." Another student said that teachers gave them tips about how college professors teach and that the teachers told them that "college professors will do it this way, so you have to practice it now."

Figure 5. Alton ECHS Students' Perceptions of the College-Going Culture at Their School

At Alton ECHS, an adaptation school, staff accompanied students on tours of various historically black colleges and universities (HBCUs) located several states away. When asked about their future plans in focus groups, all the participating students stated that they intended to enroll in one of the HBCUs. Following are some examples of student responses to how the college-going culture at Alton affected them and their peers:

- "I never heard about HBCUs before I came."
- "We have a HBCU college tour. This trip is the best trip because if your intention is to go to college and it helps show you what you need to get there. This tour will help you on which college you want to go to."
- "Here all they talk about is college … They will help you figure out which college is best for you."
- "This school prepares us for college because this school is all about college…because all the teachers went to colleges. They also all went to historically black colleges and universities."
- "[Alton] prepares you for college. Every time you turn around a teacher is talking about an HBCU. The school prepares us for college. On Fridays we have people come talk to us."

The clearest way that ECHSs can impart the message of college-going culture is through the courses students take. Rigorous high school courses and enrollment in college courses both convey the message to students that they are being "groomed" for college. In speaking about the same teacher, two students commented that she gave the students a lot of work on the computer, "so it's preparing us for college." Staff at Walnut ECHS received positive feedback from students about a class that students felt helped them succeed in college-level classes.

As many ECHSs have moved from planning to implementation, there was some concern that teachers might lower their expectations as they confront the challenges associated with educating underserved populations. While acknowledging the importance of high expectations for all students, some teachers were concerned about students' lack of basic skills and lack of preparedness for the rigors of college-level work. Some teachers were highly skeptical of the possibility and wisdom of enrolling students who were far below grade level in college courses when it would be a challenge to assist them in mastering the high school curriculum. Some students recognized that teachers had lowered expectations, reporting that "they don't ask enough of us" and asserting that classes had become boring.

IHE faculty, especially, seemed to have lower expectations for the ECHS students. Faculty at the 4-year IHE affiliated with Longview expressed concerns that they would need to "dumb down" their curriculum to accommodate the ECHS students. An IHE instructor working at Destination ECHS said the students had the "weakest background" of any students he had encountered: "It's almost impossible that these kids could get 2 whole years of college credits, because they first have to be brought to the level of being ready for college—some will be able to, but not all." It is clear that enhancing communication about high expectations among all stakeholders at ECHSs is crucial.

If there is a college-going culture in ECHSs, then students should see themselves as college students in the future. Students' discussions about their future plans suggest that the college-going culture is permeating ECHSs. The majority of students who participated in focus groups planned to pursue

some sort of postsecondary degree. Many students hoped to attend the local institutions in the ECHSI partnership. Several students stated that they would like to attend a school farther away from home, with many expressing interest in Ivy League and other highly selective schools. Of course, we would expect these students to be more aware of college as an option for their future, merely through their decision to enroll in the ECHS. Many student focus group participants commented that college was a common topic around their homes, with several expressing their parents' desires for them to attend college since their parents were not able to. However, ECHSs should be channeling students' proclivity toward college into specific goals. Our interactions were primarily with 9th- and 10th-grade students. Many of these younger students' goals were exceedingly generic. For example, some students mentioned wanting to go to college but also mentioned career goals that did not require college (e.g., flight attendant, actress, baseball player, or singer). We expect that if the ECHSs continue to develop the college-going culture, students will begin to think about the kinds of colleges they want to attend and the reasons. We might then hear more of the following types of responses, which came from a ninth-grade student at Community ECHS: "[In the ECHS we played a game called] *The Real World* where you have to act like you're 18, just moved out of your parents' house, and you're on your own. And we have to go to college for that game, and it was the first time that I actually did look into college. I found a major in educational psychology…So I would like to do that, be an educational psychologist."

On the basis of previous research (Edmonds, 1982) indicating a correlation between high expectations for students and student achievement, the climate of high expectations at ECHSs bodes well for the future academic performance of their students. When high expectations were present, there seemed to be a reciprocal relationship: Students who viewed their teachers as committed to their success tried harder so as not to disappoint their teachers. Students at St. Moritz reported that "[the teachers] tell us every day, 'We want you to succeed.'"

By choosing enthusiastic staff, by keeping the schools small, and by focusing on the relationships between and among staff and students, ECHSs have begun to set the groundwork for a powerful experience for all involved. The largest remaining challenge seems to be getting IHE faculty to buy into, and high school faculty to maintain, a culture that assumes success, rather than setting up potentially self-fulfilling prophecies for failure.

Chapter IV. Curriculum and Instruction

When people hear about ECHSs, the feature that seems to strike them is not that students receive a high school diploma and 2 years of college credit, but that these should both occur in 5 years or less. When a school is not set up to serve "gifted" students, this goal can seem daunting. To accomplish this goal, ECHSs must negotiate two complicated and largely independent degree programs to assemble a course of study that meets the requirements of both. The success with which ECHSs do so will have a great impact on their students' outcomes. Decades of research has found that students, at all levels, learn best when they are actively involved in learning, when instruction builds on what they know, and when they can apply what they have learned to noneducational settings—commonly referred to as "reform-oriented" instruction (Bransford, Brown, & Cocking, 1999; Trigwell & Prosser, 2004). For this reason, the foundation has emphasized that its schools focus on reform-oriented instructional practices. This section examines some examples of instruction found in both high school and college classrooms and what teachers say about their instructional practices.

Curricula and Course Sequencing

As mentioned throughout this report, one of the major challenges facing ECHSs is working across two educational systems. Part of their bridge work requires revamping the course curricula and sequence to both prepare students for college and leave time for them to complete college work, 1 to 2 years faster than normal. Many ECHSs do not yet have this plan fully developed. Having started with only ninth-grade students, many ECHSs are building the course sequence as they go. Most ECHSs had a plan on paper for getting students 60 college credits in 4 or 5 years. However, given the skills of many incoming students, staff members at some ECHSs believe that some students will take more than 5 years to get through the sequence. In the pages that follow, we discuss the high school courses, as well as the approaches ECHSs have taken to integrate college courses.

High School Courses

As new ECHSs, all schools had to work to develop a curriculum that would be appropriate for the skills of incoming students, meet high school graduation requirements, and be rigorous enough to prepare them for college courses. A leader at Alton ECHS said she had the autonomy to determine curriculum, taking into account the state requirements, which she matched to the degree requirements found in the college catalogue. Walton's school leader reported aligning the high school standards with college entrance standards: "In our case, we're looking at a college pretest that allows them to get into math or English college class, and also the [state assessment of student learning]. We want to make sure that the students are successful in both areas because one's a state law and one's a community college entrance requirement."

A few of the ECHSs worked with their IHE partners to develop a suitable curriculum. One adaptation ECHS, Heartfield, worked with its higher education partner to establish the ECHS curriculum so the degree program was consistent with both high school and college requirements: "Both [the high school and college] are responsible for it. Obviously, the degree requirements and the curriculum, those have to come under the accreditation umbrella. We were both accredited by the [same association]. So whatever courses are offered…it has to be consistent with what the college requires for earning an associate degree."

Because the school district office was most often the source of the curriculum requirements, some schools worked with a curriculum specialist from the district to help them adapt the curriculum for their students. When asked about planning for courses at both the high school and college levels, one ECHS representative stated, "What classes could they take at the college that would satisfy both high school and college credit requirements? Out of that, we have our proposed 4-year curriculum."

More than half of the sites began as new schools. These schools had the largest task of developing a curriculum and course sequence. In some cases, ECHSs opened without much planning time, and a curriculum had to be designed hastily. Thus, according to a teacher at Lytton Springs ECHS, "This year, the computer class came first. The [study skills course] comes first to the students in the future, which I believe is the way it should be, because it's teaching the students the skills they need in college, in school, and in life." Adaptation ECHSs already had a high school curriculum in place and used that as a jumping-off point to integrate college course work.

In addition to preparing students for college courses, many ECHSs started with a curriculum theme. The most common theme was mathematics, science, and engineering, found across several intermediaries' schools. Other foci included Native American culture and teacher preparation (i.e., preparing students to be teachers).

A few ECHSs had interdisciplinary course offerings, and several others expressed the desire to incorporate a more interdisciplinary approach. One ECHS leader supported interdisciplinary courses because "they can be more readily adapted to fit interests of the student body, because they are a fluid curriculum." One common approach used team teaching. At Longview ECHS, language arts and social studies staff paired with math and science staff to teach their interdisciplinary courses. For example, Longview ECHS offered a class called CSI (Crime Scene Investigation) modeled after the popular television show, a class in which students sketch fictional crime scenes, analyze evidence, interrogate "suspects," and present a case in a mock trial. At Walnut ECHS, the high school and IHE collaborated to offer Introduction to Anthropology and Humanities. Carriage ECHS used interdisciplinary themes that cut across course offerings. For example, "navigation" was a recent theme; history classes covered explorers and cartography, while science and math classes covered equations useful in navigation.

Although some schools had success with interdisciplinary courses, they were not without challenges. As one instructor observed, interdisciplinary courses were hard to get started and difficult to manage, especially with all the other things teachers at startup ECHSs had to focus on. Many schools expressed the desire to do more interdisciplinary teaching but had been able to implement it only on a small scale. For example, at St. Moritz ECHS, teachers focused on sentence fragments and run-on sentences in *every* class for a week. Other schools that have experimented with interdisciplinary courses were not convinced the approach was appropriate for every subject. A leader at Longview ECHS noted, "In math, you see us moving back to a more traditional focus, because the kids need to get the content." Some respondents said that time is a prerequisite to successful implementation of interdisciplinary instruction. Time must be allotted for teachers to collaborate.

ECHSs must develop curricula that prepare all students for college-level work. Different tracks of courses are one indication that schools may not be preparing all students for college. Already, most schools have set up different courses for different levels of mathematics skills. One of the teachers

at Community ECHS explained that the school had to account for students' different levels of math preparation:

> I think basically what happens is we look at student records. If you've done Algebra before and there's evidence to support that you've done it before, then you can be allowed to do the Algebra 1B. But if you've never done Algebra before or if you did only pre-Algebra then…[we] put you into AB class. Then certain students who come in have done all the Algebra requirements, [so] they go straight to Geometry. So it depends on what you're coming with.

Although not as common, many schools also differentiated by skill level for language arts courses. At Destination ECHS, ninth-grade students were grouped into three levels. The top two levels were at or above grade level in reading and writing, and the bottom level was below grade level. An instructor noted that this grouping was required by the school district, and that he taught the top two classes like an honors class. Researchers have found, however, that when students are grouped by skill level, at-risk students are less likely to receive reform-oriented instruction (Means & Knapp, 1991).

Another important feature of reform-oriented high school curricula includes basing promotion of students on demonstrations of content mastery, not on seat time. For example, one ECHS started students in a challenging course but will give the students as long as needed to master the content. The school leader noted that students will get credit once they fulfill the course outcomes, and "if it takes 18 months, that's okay." Promotion based on mastery is a core feature of the ECHS that inspired this initiative. As the ECHSs age and move students through the school, the evaluation team will be taking a closer look at how schools determine when students are ready to continue in the course sequence.

College Course Integration

By introducing college courses to high school students, ECHSs invite logistical challenges. When do students start taking the courses? Who teaches the courses? Where are the courses given? Table 3 summarizes the various approaches ECHSs took as they created a new kind of school with little clear guidance of what the best features might be.

Table 3. Characteristics of 2003–2004 College Courses, by ECHS

School Name	College Courses	Course Locations	Instructor Type	Class Composition
Alton	Yes	IHE	College	With college students
Birch Tree	Yes	IHE	College	With college students
Canyon Ridge	Yes	IHE	College	With college students
Carriage	No			
Central Avenue	No			
Community	Yes	IHE	College	HS cohort with college students
Destination	Yes	IHE	College	Just high school students
Frontier	No			
Heartfield	Yes	IHE	High school	Just high school students
Highland Oaks	Yes	HS	College and high school	Just high school students
Longview	Yes	IHE	College	With college students
Lytton Springs	Yes	IHE	College	With college students
Malvasia Grove	No			
Millstone	Yes	HS	College	Just high school students
Nebbiolo	Yes	IHE	College	HS cohort with college students
North Valley	No			
Sawtelle	Unknown			
Scholastic	Yes	IHE	College	HS cohort with college students
St. Moritz	Yes	HS and IHE	College	Some just high school students; some with college students
Tea Creek	No			
Walnut	Yes	HS	High school	Just high school students
Wildwood	Yes	IHE	College	With college students

College Course Enrollment

Some ECHSs that were open in 2003–2004 had not yet outlined a full 4-year or 5-year curriculum leading to a high school diploma and 60 units of college credit.

To meet the goals of the ECHSI, schools developed multiple avenues for integrating students into college courses. During the 2003–2004 school year, the majority of the ECHSs had some students enrolled in at least one college course. Five of the six ECHSs without college-level participation in 2003–2004 were startup schools enrolling only 10th-grade students or younger,[11] and none of these schools was located on a college campus. It is also worth noting that four of the six ECHSs that did not have students enrolled in college classes partnered with 4-year universities, which may be less likely than 2-year institutions to approve college courses for ninth-grade students.

[11] The sixth ECHS enrolled grades 9 through 12.

Of the ECHSs with students enrolled in college classes, most of the schools were gradually phasing in college-level studies by offering less rigorous college courses in ninth grade, such as physical education, health, and art. A Canyon Ridge ECHS leader, explaining this strategy, stated, "We want to make sure that our students receive plenty of support to manage their high school classes before we let them take college classes. In that way, we have a better idea of where students are." Another school leader shared that, by phasing in classes, they could receive feedback on how ECHS students handled the less strenuous elective college courses before they enrolled in more difficult content classes. ECHSs planned to increase the course difficulty as students progress through the school. Schools typically offered introductory English and a college-level mathematics course in 10th or 11th grade. Most schools planned to have their students seriously involved in college-level course work from the junior year onward. Table 4 provides a sample course sequence for an ECHS.

College Course Location

Along with different approaches to phasing students into college classes, the ECHSs also differed in how students were participating in college classes. The most common method was for ECHS students to take college classes on the IHE campus. Twelve of the 21 ECHSs with data reported that at least some of the college courses took place on the college campus. The remaining ECHSs offering college courses in 2003–2004 did so only on their own campuses. We anticipate that college courses on college campuses will dominate the initiative. Already, some of the ECHSs without students in college courses were planning to offer those courses on the college campus. In addition, some of the ECHSs with college courses on the high school campus hoped to have other courses on the college campus. The reason for offering college courses on the college campus may be, in part, practical. Colleges are often reluctant to see their faculty traveling off campus to teach students not paying tuition. The ECHS that in part inspired the initiative is located some distance from the IHE. It hired college faculty to teach all college courses at the high school site. The influence of location on student success in college courses is an important question for the evaluation to consider.

Table 4. Sample Curriculum from Community ECHS, 2003–2004

9th grade			10th grade			11th grade			12th grade			13th grade		
HS	**College**	**Max Cr**	**HS**	**College**	**Max Cr**	**HS**	**College**	**Max Cr**	**HS**	**College**	**Max Cr**	**HS**	**College**	**Max Cr**
Honors English	Health	1	Honors English	Intro to World Civ.	3	*Honors Alg II*	Eng Fund.	3	*Honors Math Analysis*	English Comp.	6		*Intro to Geology*	3
Honors Alg I	Body Cond.	2	*Honors Geo-metry*	Health and Fitness	3	*Honors Math Analysis*	History	6	*AP Statistics*	Speech	3		*Intro to Geo-graphy*	3
Honors Geo-metry	College Survival Skills	1	*Honors Alg II*	Foreign Language	6	*AP Statistics*	Foreign Language	10	*AP Calculus*	Math	6		World Geo-graphy	3
Honors Alg II	Music 101	3	*Honors Math Analysis*	Intro to Chemistry	4	*AP Calculus*	Eng Comp.	5	AP Econ	Political Science	3		Art	3
Honors Biology			Honors Physi-ology	Body Cond.	1	AP English Lang.			AP Literature				English	3
Honors Geo-graphy			AP European History			AP American History							Computer Literacy	3
													Child Dev.	3
Total Possible College Credits		7			17			24			18			21

Note: Courses in *italicized text* denote options for students. Students must take one italicized course each year.

As detailed here, Community ECHS developed a course sequence that involves starting all students in college courses during ninth grade. However, these first courses, while credit bearing, are clearly "warm-up" college courses. The curriculum continues to prepare students for more rigorous high school course work, and the rigor of the college courses increases. During 9th and 10th grades, college courses are taught by college faculty in a class with only high school students. A high school instructor attends these classes to assist in keeping order. Starting in 11th grade, students take classes together, but they are integrated with college students enrolled at the IHE. By the end of 12th grade, students have the potential to earn 66 college credits, not including AP course credits. By the end of 13th grade, students could earn as many as 87 college credits.

College Course Instructors

With the proper credentials, both high school and college faculty could teach postsecondary courses. However, schools differed in whether or not they would use faculty employed by the high school or the college to teach college courses. Two of the ECHSs with college courses had only high school instructors teaching these classes. Surprisingly, one of these two ECHSs was located on an IHE campus. However, all the high school instructors who taught college courses were also adjunct faculty at the college. The high school instructors were typically eligible for adjunct professor status through either possession of a master's degree or a certain number of graduate classes in a particular content area. Four schools had college professors come to the ECHS to teach. But this arrangement may not work for many courses because then the IHE has to "give up" classes for its students. Of course, the easiest arrangement for ECHS faculty was to have the college course located on the college campus. The choice of high school versus college faculty for college courses has some instructional implications (e.g., the differences in teaching styles in the two faculty types) and policy implications (e.g., whether the college course will count toward transfer credits) that are discussed in sections below.

Class Composition in College Courses

For many advocates of ECHSs, an important feature of an ECHS is having high school students see how college students behave. For these individuals, it is imperative that ECHS students take classes with college students. Ten of the 21 ECHSs had students enrolled in classes with college students. Sometimes, individual ECHS students may have been the only high school students in the class. In other cases, the ECHS students enrolled in small groups (or cohorts). Several of the ECHSs segregated students into college classes enrolling only high school students. Staff at these ECHSs said that this arrangement was a stepping-stone for the students. As they progress through the ECHS, students will eventually be taking regularly scheduled college courses. Again, this is a feature of ECHS design that the evaluation team will be monitoring closely as the initiative progresses.

High School Instruction

The preponderance of instruction observed in both high school and college classrooms during 2003–2004 can best be described as traditional. Nevertheless, some instructors used student-centered instructional strategies, and others recognized that they can learn to diversify their approaches to helping students learn.

ECHSs started to focus on curriculum and instruction in an attempt to engage students and prepare them for success in college. This section examines the prevalence of both traditional and reform-oriented instruction. In traditional instruction, teachers are active and disseminate the knowledge while students are passive and receive the knowledge. As implied by the name, traditional instruction has been the norm in high schools since before the 20th century (Powell, Farrar, & Cohen, 1985). In reform-oriented instruction, the focus shifts from teachers to students. As envisioned by the foundation, this type of instruction would include the following elements (AIR/SRI 2004). The content of instruction is based on students' existing knowledge, which could mean different lessons for different students. Students are involved in deciding topics to pursue, and they are given the opportunity to explore topics in depth. Students work with each other and with teachers. To make the content more meaningful, students are encouraged to make connections to the real world and to participate in projects in the community.

This section also provides students' impressions of the instruction they received. Most of the data in this section are based on the evaluation team's observations of English/language arts or mathematics classrooms. Since most ECHSs enrolled only ninth-grade students in 2003–2004, most of the observations were of this grade level.

Traditional Instruction

Many teachers relied on traditional methods of classroom instruction, in which all or part of the lesson is teacher-directed and is characterized by direct instruction strategies. Math classes in particular tended to be traditionally structured, with teachers modeling problem-solving strategies and students copying problems and taking notes. Traditionally structured classrooms tended to engage only a portion of the students. In one mathematics class that the evaluation team observed, the teacher was the main focus of the lesson as she was writing information on the board for students to copy. Two male students in the class were answering and asking all the questions. In another math class, after reviewing the homework assignment, the teacher said, "Now let's do a problem." But he solved the problem at the board with little student involvement. The students then did a problem on their own, and the teacher moved on to the next topic. As he explained the concept involved, students listened, but they did not comment or express comprehension. In yet another math class, the teacher used the overhead projector to review problems from the previous night's homework assignment. He modeled how to solve each problem, and the students corrected their own work with a red pen. The teacher reported that this structure was typical of his classes.

Some English classes also reflected a traditional instructional style. In an 11th-grade honors class, the teacher guided the direction of the literature conversation with a series of questions, allowing little room for student discussion. She also read from the text and continued to ask pointed questions, still without much discussion. At times, the teacher even answered her own questions to keep the lesson moving forward. In another class, the teacher instructed the students on various literary devices, such as allegory and symbolism, making statements to his students such as "Writing is subjective," without inviting discussion. The teacher then explained the meaning of several concepts. Students listened and took notes the entire time.

Reform-Oriented Instruction

Although traditional methods of teaching dominated the observed classes in most ECHSs, some teachers used reform-oriented instructional strategies, including active inquiry, project-based learning, interactive activities, and in-depth instruction. Reform-oriented instruction that includes these kinds of instructional strategies can promote student mastery and higher gains on standardized tests (Smith, Lee, & Newman, 2001). Although less common in mathematics classrooms, there was evidence of reform-oriented instruction in some classrooms. For example, one instructor chose a mathematics curriculum specifically for its nontraditional approach. He said, "It's a constructivist approach to mathematics, and students learn through doing. There is typically less lecture and quite a bit of math problem solving embedded through application." In another math class, the teacher designed a student-centered review activity for a test, which required the students to work in groups to create visual representations of the material covered in the unit. Students worked collaboratively for 30 minutes, discussing material from their notes, drawing, cutting, pasting, and labeling diagrams. The presentations included examples of circle arcs, chords, congruence, and tangents; student audience members probed presenters for clarification and justification of their examples,

sparking discussion of the concepts and theorems to be tested. A lesson such as this incorporates many of the principles of reform-oriented instruction, including increased student activity and responsibility of learners.

In a science classroom, we observed students engaged in active inquiry and project-based learning. The class was working on a week-long project on the atmosphere, conducting research on topics such as global warming, the greenhouse effect, the carbon cycle, and the Dobson unit. During this particular class period, students worked in small groups conducting Internet research, composing text for their projects, or responding to and editing one another's text. The teacher circled the room, discussing work with various groups. He stopped and spent time with a student, helping her to understand a concept about hot and cold air. Using a series of questions and examples that the student could relate to, the teacher was able to successfully illustrate the concept. When the student could not say which air was denser, the teacher did not give her the answer. Instead, he asked, "You know those balloons that float. Are they filled with hot air or cold air?" The student responded, "It's filled with hot air." The teacher affirmed her answer and continued, "So hot air expands—it's lighter." He then asked whether the student had ever made a cake and explained that if you spread out the batter in a pan, the pressure spreads it out. He said the same thing happens in air: "Pressure pushes down and pushes cold air in to where the warm air is." The student nodded that she understood.

Figure 6 contrasts traditional and reform-oriented instruction in two English/language arts courses, both covering *Romeo and Juliet*.

Challenges of Using Reform-Oriented Methods

In interviews, some teachers commented about the challenges of using less traditional methods of instruction in their classrooms. One teacher expressed concern that she still had a hard time incorporating less traditional methods in her classroom because she felt that repetition and practice were a good use of class time. She admitted that she was trying to do more group work and that she had her students work with others so that they would be less dependent on her. One teacher felt that some mathematics topics easily fit in with reform-oriented instructional practices, but "with the higher-level math, it is better to give them lots of examples and repetition and keep presenting it to them." Another teacher talked about how she was still "figuring things out" in November and that if the students were surveyed, they would probably give her poor marks. The teacher reported, "I learned to mix things up to come up with a variety of different activities. And I continue to learn about different activities that can be done…I think they're enjoying the class more." The teacher believed that the 80-minute schedule allowed her to do a variety of activities.

Figure 6. Examples of Traditional and Reform-Oriented Classes Covering *Romeo and Juliet*

Traditional. The teacher involved many students in a recitation of the story line for *Romeo and Juliet*. He then initiated a discussion about the love relationships in the play. When one student commented on another student's response, the teacher quickly stepped in and said, "Okay, let's get back to the sequence of the play. We'll pick up this love stuff later." This particular teacher's discourse style generated oral participation from a wider variety of students than a straight lecture format, but the teacher still maintained tight control over the content of the discourse.

Reform Oriented. In this class covering *Romeo and Juliet*, the lesson was student centered, and it incorporated active inquiry and project-based learning strategies. The teacher divided the students into groups to present an act from the play. One group presented its version while the other half observed and evaluated the presentation. Students were instructed to bring in one prop for the presentation; the props were intended to have significance for their character in the play. This lesson engaged students by providing each student a specific task and increased student responsibility and accountability by requiring public performance.

Students' Impressions of High School Instruction

Students expressed both positive and negative opinions about their high school instruction and academic experience. Preliminary evidence suggests that students' impressions of their high school instruction correlated with the types of instructional strategies teachers used in the classroom. Students tended to have positive comments about classes in which the teachers made an effort to incorporate more reform-oriented strategies into their instruction. When asked what was different about the school work at the ECHS compared with his previous high school, a student responded, "It's more fun and creative. The teachers find new ways to get us to learn…in math she takes the activities and breaks it down. She takes it step by step. They don't rush it." Another student commented that in her class, everyone works like a family because the whole class works together. In a reading class, a student reported that the teacher kept the class fun by asking students to relate what they were reading to their own lives. However, in the quest for higher-level work, some students felt that they were missing the basics. One student expressed concern about a technology class. According to this student, many of the students did not know how to type. He felt that the teacher should focus on that skill more than the work that they actually did. At the same school, another student expressed her opinion about her English class: "We have a writing class, but we're supposed to be learning grammar. You can't just read books and write…So when we have papers and stuff, they give us low grades because sometimes our grammar is not good. They're not teaching us the grammar, and they wonder why stuff is so bad…we can't just grab it out of the sky."

On the other hand, students conveyed more negative impressions of their high school classes in which more traditional teaching methods were used. One student remarked, "The only thing we do in science class is homework and books, but not many interactive things." These students thought that teachers needed to do more in class to make learning fun and less routine. Another student observed that when teachers were frustrated, they "just teach the lesson" and put little energy into it.

College-Level Instruction

ECHS students participated in a wide variety of courses for college credit and experienced a variety of instructional styles. Although college students may be older, the same instructional strategies that successfully engage secondary school students are those that engage college students. As in high school classrooms, college students achieve better outcomes with reform-oriented instruction, in which students rather than teachers are the focus of the classroom (Trigwell & Prosser, 2004). The evaluation team observed far fewer college courses than high school courses, but already, some interesting pattern have emerged. This section discusses the types of instruction in college courses and how instructors and students felt about some of the classes.

Traditional Instruction

Orientation-style courses are those that focus primarily on preparing students for college. An instructor described her role teaching one of these courses: "The course is entitled Life Skills, providing the students with specific information that will assist them in acclimating to college. It starts out with 'you are in college' and goes through various chapters. We dealt with career development, and the one thing that I have focused on is critical-thinking skills." In a lesson, this instructor engaged her students in a sorting activity to determine possible careers based on their interests and preferences. At the conclusion of that activity, she engaged the students in a long discussion about change, offering advice and examples related to decision-making. Such a format can (and in this instance did) offer an opportunity for students to connect meaningful personal experiences with course content. However, the instructional practice observed was primarily conventional in that the instructor determined the topic and led the discussion.

The college English classes in which ECHS students were enrolled tended to have similar characteristics. Both the content and the mode of instruction were quite traditional, with lecture being the instructional mode of choice. In one college English class, an instructor conducted a grammar lesson about commas, using a packet of worksheets. She stood at the front of the room and read aloud from a text, instructing students to use commas to separate two or more items in a series. In this particular classroom, the lesson eventually switched to a focus on writing, with students comparing a memory from their own childhood with a short story. The instruction was extremely explicit, with diagrams of various compare-and-contrast formats and lists of sample transition words. At no point were students engaged in active inquiry or project-based learning; their activity was determined and controlled by the teacher.

Reform-Oriented Instruction

In the few college classes observed by researchers, little of the instruction included features of reform-oriented instruction. However, a few examples did emerge in some noncredit courses. One ECHS has developed an innovative approach to introducing ECHS students to college course content. Although not a credit-bearing college course, an intensive archaeology seminar introduced students to the basics of the discipline, while engaging them in hands-on practice in the field. During the summer semester, instructor planned to involve students in the excavation of a local school site to inform and enrich documentary research conducted by the students in a high school class. In a similarly designed mini-course, an anatomy professor used an interdisciplinary approach to structure hands-on learning opportunities:

> The seminar is "From Bones to Behavior." The idea is for them to be introduced to both human and animal bones from archaeological sites and follow the scientific method through a series of questions which would lead them to "What does a bone mean?" So we started with basic principles like, what is anthropology, what is the scientific method, stating hypotheses. We are doing a lot of hands-on bone identification in terms of forensic principles and taxonomy.

Although we did not observe this course, the design of the course includes many of the principles of reform-oriented teaching, including embedding key concepts within a framework of inquiry.

Students' Impressions of College Courses

Students' impressions of their college courses and instructors were varied but largely positive. Many students voiced positive comments about the relevance of their studies, including the communication skills they had acquired in a speech class and their improved writing skills from a college English class. The increased level of independence was a common theme; students tended to feel that college instructors expected them to be mature and gave them more responsibility than their high school instructors did. Students' critiques of their college courses and instructors were more scattered. Students often complained about the amount of straightforward lecturing and note taking. They tended to focus on the amount of time spent on these activities in college classes.

College Instructors' Reflections on Their Teaching

Many college instructors struggled to adapt their teaching methods to meet the developmental needs of high school students. Some instructors recognized the students' age and their inability to focus during a lecture for long periods of time, and therefore attempted to integrate other modes of instruction. One instructor discussed his modified lecture style, which is based more on questions posed by the students. Several instructors commented that the 2- to 3-hour sessions might be inappropriate for the age of the students and expressed a desire to modify the schedule. Yet another group of instructors expressed concerns about their ability to connect with students this age. One particularly forthright instructor said:

> I know that I lack some of the skills high school teachers have. One of the reasons that I am not a high school teacher is that I lack the awareness to deal with groups of kids of that age group consistently. I don't know if there can be a close interaction between the high school teachers and the college faculty to give the kids a good experience. Or you need a special kind of teacher who can combine that within his/her own capabilities.

This particular instructor, though extremely aware of the challenges of the role, has continued to adapt his vocabulary and his class activities in his attempt to reach all the high school students. He commented that a smaller class size helped and that teaching the high school students was "a lot more fun than teaching somebody who thinks they already know what you are going to teach them."

One ECHS developed an innovative collaboration between high school instructors and the college librarian (who expressed her enjoyment of working with the high school students). This partnership focused on providing age-appropriate academic research skills instruction to the ECHS students. The librarian arranged active orientation sessions in which students researched topics related to their English and history classes, learned to use periodical databases, and learned proper bibliographic citation format. She made the sessions interesting by exposing students to the more in-depth and rigorous aspects of research, such as a presentation by the archivist in a session on local history. Both the content and the methodology of her instruction evolved in response to her experiences with the high school students.

Many college instructors also commented on the difficulty of teaching ECHS students who were academically unprepared. A college English instructor spoke of her efforts to address students' lack of writing skills by providing a lot of encouragement and nongraded writing opportunities: "At the beginning, they had a really hard time letting people see their writing, especially me. And I would get three or four sentences. And now I'm seeing pages turned in." Several instructors spoke of the tensions between the way they would normally teach and what they felt students needed. One college instructor spoke passionately about the need to prepare students for high school exit exams, pointing out that more integrated learning experiences and research skills were more engaging to students and more academically rigorous, but not necessarily akin to what students needed to demonstrate on exams.

Several college faculty members indicated that ECHS students did well in the college classes. One professor noted that several students in her class "are really doing well, and you would not be able to distinguish them from regular college students." Another faculty member noted:

> We really started with a very conservative college curriculum, a very slow start. Really, no college course is easy, but we weren't throwing our toughest stuff at them. They did very well with that. In fact, the 10th graders told us 9th grade was boring and 10th grade is too hard. So now we're working on revising the curriculum to balance it out a bit.

Several faculty noted variations on this theme. As put by one faculty member: "[The students tended] to surprise us…they just knocked us over." In general, college faculty who had contact with the ECHS students found them to be very bright and motivated. However, as discussed above, most ECHSs had only ninth-grade students, and generally those students enrolled in elective college courses, noncredit courses, or no college courses at all. Also, some IHE faculty stated that they were concerned about the ability of ECHS students to keep up in their classes, based on initial experiences.

Chapter V. Key Factors in ECHS Implementation

Thus far, the report has provided a profile of the existing ECHSs as they have emerged over the first 2 years of the initiative. How the initial schools developed is the result of complex interactions between the initiative's basic structure and the policy environments into which the schools have been introduced. The first part of this chapter focuses on the roles of Jobs for the Future (the "coordinary" for the initiative), the intermediary groups funded by the foundation, and the parties to the local partnerships that actually establish ECHSs. The second part discusses co-governance issues within the local partnerships, the impact of policies at all levels of government on ECHS development, and some of the key funding issues that the initiative confronts as it moves ahead.

Role of the Coordinary: Jobs for the Future (JFF)

As JFF's role has shifted to include more accountability work with intermediaries, intermediaries in turn have shown improvements in their compliance with accountability procedures and activities.

The term "coordinary" is used within the ECHSI to describe the multiple roles played by JFF. The organization both *coordinates* the overall initiative for the foundation and serves as a superordinate *intermediary*, supporting other intermediaries that are directly engaged in ECHS development. Since the beginning of the initiative, the basic functions of the coordinary have included identifying or providing technical assistance needed by the other intermediaries and spearheading efforts to improve the policy environment for blended high school/college models such as ECHS. Beginning in 2003–2004, JFF added an accountability function to its responsibilities, working with the intermediaries to assess progress and mutually define short- and long-term goals. This section of the report discusses JFF's role and activities from its own perspective and from the perspectives of the intermediaries.

Coordinary Role in the Early Years of the ECHSI

Technical Assistance Function

During the initial years of the initiative, the JFF team working with ECHSs reported that they devoted most of their time to very specific requests for technical assistance from the intermediaries, such as:

- Samples of memoranda of understanding and letters of agreement
- Information on secondary and postsecondary policies in certain states
- Help in accessing public funding sources
- Sample of a job description for a high school principal.

The intermediaries corroborated that they depended heavily on JFF to answer all kinds of questions in the early months of the initiative. Most of them reported that, on average, they spoke with their assigned JFF contact person several times each week. Gradually, and in response to common requests from multiple intermediaries, JFF developed an online library of tools for use in the planning and development of ECHSs at both the intermediary and local partnership levels. Several intermediaries also noted that JFF has been helpful to them in learning when and how to approach

the foundation about a variety of issues. For a few intermediaries, however, having an organization standing between them and the foundation has been unfamiliar and somewhat uncomfortable.

The intermediary-specific technical assistance that JFF provided in the first years of the ECHSI was appreciated and on target, according to the intermediaries. In interviews, comments about the support received typically included words like "incredibly helpful," "helpful advocates," and "fantastic." Asked whether there were areas where JFF could have provided more support, one interviewee said, "I don't know that I could say that. They've offered. We just need to use what they've offered."

Convening Function

During the initial 2 years of the initiative, JFF successfully convened large and small groups of ECHSI participants many times for various purposes: network meetings of the leaders of all intermediaries, ad hoc subcommittees of this network, and meetings for the intermediaries and the leaders of each intermediary's growing network of ECHSs. By May 2004, a meeting involving all interested parties within the ECHSI had reached convention size, requiring extensive planning and resources. In interviews, all intermediary leaders indicated that the networking meetings (of all types) convened by JFF have been very useful. One director put it this way:

> The annual convenings that JFF has organized have been extremely valuable for our sites, not only to connect with others in the state who are doing the work, but to see the national impact and to hear different approaches to common problems.

Policy Function

As stipulated in its original proposal, in addition to the convening function, JFF has taken the lead for the entire initiative on investigating federal and state policies relevant to the funding and operation of blended secondary/postsecondary models of education. JFF staff reported that they have taken a "tiered" approach to the policy work. At the macro level, in fall 2003, they organized a large, national conference partly to publicize the idea of blended programs to policy-makers and others. Presentations and papers from this conference resulted in a book published by Harvard Education Press (*Doubling The Numbers: Increasing Postsecondary Credentials for Underrepresented Youth*). At another level, JFF analyzed legislation and policy in a number of states where ECHSs were being implemented. The purpose of this work was to identify potentially enabling and inhibiting policies and present the results of the analyses in formats that can be used to advocate for blended programs with state and federal policy-makers.

All of the intermediaries were grateful to JFF for taking on the job of unraveling the policy conundrum. In some cases, JFF staff went to state capitals with or on behalf of intermediaries. There is some protocol associated with this type of work, and in at least one case, feathers were ruffled when JFF visited the state higher education agency without first informing the president of the intermediary organization. Nevertheless, everybody associated with the ECHSI understands that state policies, particularly the ways in which funding streams work, will ultimately make or break the sustainability of the initiative.

Most of the intermediaries acknowledged in interviews that they had neither the time nor the expertise to pursue the policy work. This was particularly true for the intermediaries that were supporting national networks and needed to understand the policies in multiple states. As one intermediary stated:

> They need to focus on the policy piece. To expect us to be actively involved in their policy agenda on top of our implementation activities is a stretch. The roles that have emerged have to be reexamined.

On the other hand, some intermediaries were well connected to state agencies and legislatures and were in a strong position to collaborate with JFF on policy and advocacy work. According to JFF staff, one "aha" that has emerged for them and for the foundation over the early stages of the ECHSI was that the initiative was off to a more robust start where an intermediary was working within only one state and thus, among other things, might be able to easily formulate a coherent strategy for pursuing the policy agenda. This was true for intermediaries KnowledgeWorks Foundation and The Utah Partnership for Education and Economic Development.

Overall, with much hard work, JFF made a strong start in coordinating the ECHSI and in supporting the other intermediaries. However, the initiative is complex and groundbreaking. Therefore, at about 1½ years into the ECHSI, the foundation and JFF took stock of the initiative's progress and made midcourse corrections concerning the role of the coordinary in its three main functions of providing technical assistance, convening stakeholder groups, and influencing policy.

Midcourse Adaptations to the Coordinary Role

In December 2003, the foundation and JFF conducted a review of the state of the ECHSI, including a realistic reassessment of the coordinary role. A central question in this discussion, according to JFF, was whether the project should continue to expand rapidly or whether the focus should be on the quality of education that operating ECHSs offered. The answer would have significant bearing on the role that the coordinary would play going forward. The decision was made to focus on quality, a decision that acknowledged that the coordinary lacked the capacity to be all things to all intermediaries and all ECHSs. The implications of this decision for the coordinary role with respect to technical assistance, convening, and the policy agenda are discussed below.

Technical Assistance Function

JFF described the changes that have occurred in its technical assistance strategy as a result of the December 2003 meeting with the foundation as "clarification of expectations of [intermediary] roles." JFF's role was more specifically defined to address the monitoring of accountability among the other intermediaries that were directly engaged in developing ECHSs. Thus, in the early part of 2004, JFF conducted a face-to-face status review with each intermediary. In many cases, a program officer from the foundation also participated in these reviews. As a JFF staff person put it, the coordinary role had shifted from hand-holding to that of "critical friend," a term that has come to mean a sympathetic outsider who can ask hard questions.

With agreement that the focus should be on the quality of each ECHS program, the review process was able to objectively assess the progress of newly operational schools, as well as those that were in

the pipeline. In several instances, intermediaries acknowledged that their first schools to open had not been rigorously held to the Core Principles or intended standards of the ECHS model. These schools would need "remediation" of some kind. Further, the experience of rushing to open them suggested that additional planning time would benefit several schools in the pipeline. JFF reported that delaying school openings was not an option prior to its December 2003 meeting with the foundation. This adjustment of focus and expectations for the initiative is extremely important to the continued rollout of the ECHSI over the next few years. The foundation has made a commitment to support intermediaries to open more than 175 ECHSs, but the pace at which this will happen may extend out the process for several years.

The long-term goals for the ECHSI are established by the grant agreements between the foundation and the intermediaries. The issue is how those goals will be met. As a result of the review process, the coordinary and the intermediaries are now specifying short-term goals through a series of technical assistance/accountability plans covering 6 months at a time. The plans are tailored to the needs and status of each intermediary and specify responsibilities of both JFF and the intermediary.

The initial intermediary reviews were held in February and March 2004 and will now be part of the ongoing technical assistance process. According to interviews with the intermediaries, the reviews were intense and unsettling for some, particularly those that had been part of the initiative from the outset. The modification of JFF's role in the initiative required the other intermediaries to reframe their relationship with JFF. As one intermediary's director said:

> [There is a] funny dance we all go through between being a critical friend and a cheerleader. Tricky to know exactly what JFF's role is. I think they are an intermediary from the Gates perspective and a colleague from ours. It would be nice if we had a clear-cut perspective. We try to communicate that we're in it together, we are advocates, our role is to explain issues to JFF. It would be nice if JFF could clarify their role.

Another intermediary was of the opinion that JFF had experienced a learning curve in terms of understanding this intermediary's unique mission. One respondent stated that JFF had been "weak and inconsistent" in advocating for the intermediary's ECHS development strategy and somewhat different curriculum philosophy. This intermediary thought the review process cleared some air.

Although the review process was disconcerting, especially for the original seven intermediaries, over time, the intermediaries understood its value, and many adapted the process for use with their own networks of schools:

> We as an intermediary had to present a written report and an oral discussion about our challenges, strengths, lessons learned, and our work plan. So we will be doing a program audit review with our sites…we will have this program audit review and in it they have to respond in a written report and also come to our offices and talk it through with a panel that includes [our staff] and JFF staff, and discuss their lessons learned, challenges, strengths, and what is their action plan. We will then give them critical feedback and say this is what we think you are doing well, this is where you can use some resources and some help. And

> from that we will draw up very detailed grant agreements that spell out explicitly what the expectations are.

Interestingly, JFF staff reported that the newer intermediaries were more comfortable with the review process and seemed to have an expectation that the coordinary was, inevitably, an accountability arm of the foundation.

Convening Function

As noted earlier, JFF convened a large group of intermediaries and representatives from their schools in May 2004. In the future, JFF plans to conduct regional initiative events that are smaller but address similar professional development and technical assistance issues. Initiative-oriented meetings of two-person teams from each intermediary will continue to be held twice a year. In addition, the coordinary will cosponsor professional development institutes focused on literacy with the other intermediaries.

Policy Function

In interviews, JFF staff acknowledged that they cannot master the policy intricacies of every state in which an ECHS is implemented. With the foundation's agreement, therefore, they will help with policy analysis and advocacy in some states, particularly those with a concentration of schools. California is the prototype because so many intermediaries (currently five) and ECHSs will be operating there. Because each intermediary has its own model for an ECHS (while simultaneously adhering to the same Core Principles), the policy approach in California needs JFF's coordination.

In an interview during summer 2004, a JFF representative stated that the coordinary was moving forward to establish a policy agenda, rather than putting out individual policy fires as they arose. One issue that has become clear and will need to be addressed through policy is the need for postsecondary institutions to have some incentive to collaborate in ECHSs and other blended models.

Despite JFF's skill in identifying and analyzing state policy issues with respect to creating friendly environments for ECHSs, intermediaries who are closer to the ground anticipate significant challenges. The leader of the ECHSI for one intermediary expressed skepticism about how far the policy agenda is likely to move forward under the current arrangement:

> JFF can certainly assist, but they can't run an advocacy campaign unless they hire somebody full-time here to do it. So if there is an expectation on the part of the foundation that there will be work done to improve policy and legislation in [the state] to make it more favorable to ECHSs, somebody's got to be accountable to do it.

The foundation's and JFF's decision to make midcourse corrections in the coordinary's strategies is well founded. As the next section of the report makes clear, some intermediaries floundered in the first couple of years of the initiative, and all intermediaries had issues that required fresh ideas about implementing ECHSs.

Intermediaries

Intermediaries represented a range of organizational types and adopted a wide range of development strategies. In general, intermediaries that worked in multiple states faced more implementation challenges than those working in a single state.

As the distributors of the foundation's funding, the ECHS site selectors, and the primary technical assistance providers, the intermediaries have played an extremely important role in the early years of the initiative. Because of the importance of this role to the ECHSI strategy, the evaluation team has produced, and will continue to produce, a report summarizing the work that intermediaries do to support ECHSs. This report for 2003–2004 can be found at http://www.gatesfoundation.org. The following section on intermediaries summarizes the major points made in that report.

Implementation Activities

During this early stage of the initiative, intermediaries' primary activity has been to find organizations interested in developing ECHSs and to distribute grants to selected partnerships. Intermediaries found interested partners through requests for proposals (RFPs) and by inviting organizations to participate. For some intermediaries, the lack of an RFP process in selecting sites for the ECHSs has led to issues of inconsistency with design and implementation efforts in some schools. Prompted by the foundation and JFF, most intermediaries have now agreed to use a written application and review process that requires interested partners to develop thorough implementation plans, thus allowing intermediaries to realistically assess a site's readiness to undertake the work in the future. Given the complexity involved in creating an institution that crosses educational systems, more than half of the intermediaries fell behind in their planned school openings. Sites failed to open because local partnerships fell through, there was no principal, or adequate facilities were not available. However, a slowdown is not necessarily a problematic finding: Some intermediaries slowed down school openings to give planning teams more time to develop the ECHSs.

During planning and after schools opened, intermediaries offered a wide range of technical assistance to partnerships and individual ECHSs. These activities included holding conferences and workshops and providing coaches or site liaisons. Intermediaries also fostered networking through the development of, for example, electronic connections among ECHSs, site visits between ECHSs, and an extranet for use by ECHSs' principals and staff. Intermediaries also encouraged local and state support for the initiative, including additional funding. For example, several intermediaries received funding from the Kellogg Foundation to support their community engagement efforts, including funding to support staff members. Further, some intermediaries played a role in advocating an extensive policy agenda, in addition to the efforts of JFF, seeking support from states and localities for the ECHSI. Generally, ECHS staff felt that the intermediaries were extremely welcome supporters, partners, and advocates for their schools.

During the years of the initiative covered by this report, few intermediaries had yet developed explicit plans for ongoing ECHS accountability beyond the initial funding decision. As the foundation has focused more attention on intermediaries' oversight activities, many intermediaries have determined that they need to institute thorough review processes with all their schools and

ECHS partners. In addition, some intermediaries have tightened, or plan to tighten, the level of accountability required from participating ECHS partners.

Intermediary Capacity

Not all intermediaries had the background or experience in-house to support the partnership building that is necessary to make ECHSs work. With regard to grant distribution, 6 of the 10 first intermediaries fell behind their initial plans to open ECHSs. One intermediary pinpointed this problem and described it as "a tendency to try to do too much, and then they don't do it well." One factor that seemed to strongly influence the intensity of relationships between intermediaries and their ECHSs was the geographic breadth of the intermediary's network. For example, instructors at one ECHS in a national network had frequent interactions with staff of the intermediary, most likely because of the close proximity of the intermediary's office to the school setting. In contrast, staff at another ECHS under the same intermediary but in a different state knew of the funding and guidance received from the intermediary but knew little else about the organization. A staff member at CUNY noted, "We have the luxury of being more hands-on than other intermediaries because of working with only one school district."

In general, it is very clear that the learning curve has been steep in terms of plans, capacity, and expertise to support these activities. Some intermediaries also had difficulties meeting ECHS needs because they overestimated their own organizational capacity and thus began their initiatives without enough staff to carry out their funded activities. Many intermediaries will be focusing on building organizational capacity in the years to come to respond to previous labor shortage problems. To this end, intermediaries have fairly recently hired additional staff to improve their technical assistance or professional development efforts, directors to lead their ECHS programs, and/or staff who will be responsible for seeking additional funding for the ECHSI.

Local Partnerships

Partnerships are a key component of the ECHSI design. To implement the initiative effectively, the fledgling ECHSs need close support from all the partners that collaborated to found them. In particular, collaboration and coordination among all entities are important to ensure that high school students are able to take college courses and earn college credit while still fulfilling all requirements of their high school education.

School Districts

When looking at the factors that support or inhibit the planning and development of ECHSs, districts can play an integral part or have little to no role. At one extreme, the districts have little influence over state charter schools. For the majority of the schools, however, districts have significant influence over the ECHSs, affecting whether the ECHSs grow or are hindered in carrying out the ECHSI vision.

District Support for the Initiative

The district partners have been largely beneficial to school implementation. New schools associated with a district had fewer struggles concerning facilities, human resources, and funding than did schools opening outside of the local school district.

Districts, through existing relationships with intermediaries and IHEs, can play a key role in supporting the planning and development of ECHSs. Thus, one intermediary staff member said, "All the districts were chosen because they were already working with [us]." Preexisting relationships can also facilitate development at the ECHS level. For example, one school leader noted that because of his previous work in the district, there was a certain level of trust that enabled him to move forward without having to check in with the district at every turn. Capitalizing on existing relationships between districts, intermediaries, and IHEs has helped all parties come to agreement more easily.

Developing and strengthening the existing relationships between districts, IHEs, and intermediaries is an important piece in the implementation of ECHSs. Thus, even when there is strong support from the IHE, the lack of district support is often enough to curtail forward progress with an ECHS. A leader of one intermediary reported that work with a district was on hold:

> The superintendent there has not demonstrated any interest in doing this. We realized, without the school system on board, it would be really difficult to do. So we're putting together our correspondence back to the university partner to let them know that it appears we're going to have to go elsewhere with this, unless there are some other options we don't know about.

In another example, one intermediary spoke about the effect that a change in the district's administration had on what appeared to be a strong site: "We thought we'd have them open by this year…And then they had a change in administrations, so we had to start over in some ways. We have to reengage the [district] administration." Because this occurred with what appeared to be one of this intermediary's strongest local partnerships, this leader lamented losing the potential site.

For many ECHSs, developing and strengthening relationships with a district is an investment in their own future. A representative of PCC said, "The relationship in the college and high school districts is critical. We are always working on those. Some districts are a challenge to work with, and others are always sending us people. So it depends on the relationship building." A staff member at Antioch echoed the importance of building a relationship with the district, saying, "EC project staff maintain consistent communication with tribal chiefs, state policy experts, district superintendents, community college personnel, and other key stakeholders in the EC initiative through face-to-face meetings, telephone, and e-mail contact."

Districts' Support of the Early College High Schools

Having a district's leadership involved in the early planning process can be just as important as the relationships between the districts, IHEs, and intermediaries. One example of how critical early involvement in the planning process can be is reflected in this statement made by one ECHS director: "The school district was invested in this to the extent that their director of counseling attended all of the trainings. He attended the JFF conference in New Orleans. The 'Roll Up Your Sleeves' session was very helpful because he was right there to help solve this, and all the school

district issues were right there on the table." In this case, having a district leader so accessible helped shed light on issues that could be potential conflicts or barriers later. Districts willing to commit leadership resources to the ECHSI in the planning phase may help smooth the ECHS implementation process.

The assistance requested by ECHSs varied in type and quantity. One school leader, for example, requested help from the district in designing an assessment for his ECHS, saying, "I have asked central office to design a test to see if the students have mastered Integrated Math 1 and are ready for Integrated Math 2." Another school leader needed help designing curriculum for her school because the ECHS is bound by what the school system tells it to do. She said, "We are working closely with a curriculum specialist from the district to design the curriculum. We have 9th and 10th grades planned." Because each ECHS must be accountable to its district, it seems logical that the ECHS would call on the district to provide guidance and resources to remain compliant with its requirements.

Districts were the primary funding source for the ECHSs that were affiliated with districts. However, contributions ranged from extensive ("All of our staff are covered through the [school district], and so is the students' tuition") to minimal ("The districts do pay a tuition per student, which is very nominal"). Districts also often provided physical facilities at no cost.

Challenges from Districts

One feature that most ECHS leaders, at least those affiliated with districts, have limited control over is the pool of teachers from which to choose staff. In most sites, the hiring was coordinated by the district and limited to teachers who were "from the existing pool of staff in a district and…members of the local union," while in other sites the district posted jobs specifically for ECHS teaching positions that were open to anyone who was a "probationary or contracted teacher." However, from this pool, school leaders typically made the final decisions about hiring prospective teachers.

Another integral feature of an ECHS is designing a curriculum that allows students to meet local and state requirements as well as earn the requisite 60 college credit hours. Most ECHS leaders reported that they currently had limited control over the curriculum. At some sites, the curriculum was mandated by the district. As one school leader said, "In terms of curriculum, things are pretty clear because we have to do what the school system tells us to do."

Colleges and Universities

The ECHS model requires the participation and active leadership of IHEs as part of the local implementation partnership. Interviews with IHE-based respondents and ECHS leaders suggest wide variation in the level of commitment of participating IHEs to the ECHS concept, ranging from broad-based enthusiasm among faculty and administrators to outright skepticism.

Like districts, IHEs play a major role in the ECHSI. The level of commitment of college or university partners to the ECHS vision affects the development of the school. Although many local partnerships have good support from the IHEs' side of the equation in terms of shared vision and human and material resources, other IHEs struggle to understand the ECHS vision or to turn the vision into acceptable programs.

Shared Vision

Many IHEs showed support for the ECHSI from the beginning of their participation in the initiative. Several college administrators had visions that aligned with the ECHS principles, choosing to participate because they believed in promoting accelerated learning for certain disadvantaged populations, such as Native Americans, Latinos, and low-income students. In describing his school's involvement, one college administrator said, "We've got two native tribes in this area. The number of those kids who graduate from high school and go on to college is minimal. In some respects, I think that's a shameful comment on how we do things up there. We have a role. This looked like a way we could address some of those issues. I'm excited about the possibilities." Many colleges also were concerned about the skills of incoming students and hoped to better prepare their potential future students. Other IHEs became involved because they saw the partnership as a means to benefit both the high school and the college simultaneously. In return for offering college credit to high school students, colleges have been able to offer field experience in the high schools for their students in counseling, teaching, and social work programs. One college also hoped to generate publishable research through its partnership with the high school.

In cases where IHEs supported the vision of the initiative, the working relationship between the high schools and IHEs has strengthened. In discussing the partnerships between the high schools and the IHEs, one intermediary said, "It has surpassed expectations. There has been incredible buy-in from the IHEs, a willingness to deal with policy issues. One by one, the colleges are meeting the issues head-on through creative problem solving." Several high school staff members stated that the partnerships have exceeded their hopes. One ECHS staff member said, "The relationship with [the] community college has been great, and they have been extremely supportive. They really bought it hook, line, and sinker. I like it that we are really infused with the college. And we will feel much more a part of the community."

Methods of Support

Colleges and universities have supported the implementation of the initiative in a variety of ways. IHE staff have served on the advisory or governing boards of the high schools, dealing directly with implementation and planning issues, such as developing curriculum, arranging course schedules, and aligning college and high school courses. Another major form of support has been in the provision of resources to the high schools. The largest resource provided to some schools was a location for the high school on the college campus. The dean at one university said, "The college is going to support this program any way it can." This IHE has provided a space for the ECHS, and the chancellor would eventually like to move it to a new science building that will open in the near future. Other important resources provided by the partnering colleges included access to facilities and enrichment services, such as libraries; computer and language labs; career resource centers; and counseling, tutoring, and college academic advising. At Heartfield ECHS, for example, the high school students can see college advisors, and the college has also hired an academic coach to work with the high school students throughout the year. College instructors have also worked with high school teachers in creating specific lessons and participated in other joint professional development opportunities.

IHE partners tended to contribute to ECHSs through resources and, occasionally, outright financial support. IHEs commonly donated space and maintenance. For example, one IHE charged the

school district $1 per year for the land where the school building was located. Most IHEs covered the cost of staff time or IHE staff volunteered their time (neither of which may be sustainable long term). These staff worked on developing the ECHS, teaching classes, and mentoring teachers, as well as other activities. Several institutions provided grants directly to the ECHS. These funds went for tutors, textbooks, professional development, and technology. Some IHEs pitched in to support parent mailings and cover other small expenses. Some IHEs, however, did not intend to support the ECHS with resources. One IHE joined the partnership with an explicit understanding that it would not incur any expenses, which turned out not to be the case. Another IHE charged the ECHS for renovations made to its original space on the campus but had not yet returned the funds to the ECHS after moving it elsewhere on campus. Some IHEs charged the ECHSs rent for the facilities they used.

Challenges from IHE Policies

ECHSs have to adhere to policies of the local IHE, particularly those regulating matriculation, remediation, and placement. These IHE policies often pose implementation challenges. At some sites, for example, ECHS students could not matriculate to the partner college because they had not graduated from high school. At one site, the IHE made modifications to accommodate the ECHS model. Here the chancellor waived the high school graduation matriculation requirement for the ECHS students by increasing the number of credits a student could take as a "special student" from 12 to 60 credit hours. Other ECHSs sought modifications to policies requiring all prospective students to take assessments in reading and math prior to course enrollment. When one ECHS realized that no waivers for passing the placement exams would be granted for its students, it placed all ECHS students into a remedial class together. The students then benefited from completing the class as a cohort and passed the placement exam at three times the rate of traditional new college students. Despite the ability of one ECHS to make lemonade from lemons, placement exams remain an impediment to enrollment in content classes at partner IHEs for many ECHSs' students.

Lack of IHE Support

Not all colleges have been fully supportive of the initiative. This lack of support has inhibited the development of the program in specific ECHSs. It appears that sharing the vision of the ECHSI does not necessarily translate into active support. One high school leader said, "I think that the college talks really good about the project. I think that they do not support…us the way that they should. I do not think that they put forth that additional effort where they bleed a little bit. They don't want to bleed to make it work." A leader at another ECHS recognized that IHE administration support did not mean full faculty support. Arrangements with schools are often made by university presidents or deans, without commitment from the faculty. As this school leader described it:

> We got into a bit of a rough start in terms of the college…[T]his was an initiative that had tremendous support from the college president. But then, when you get to the operational level, all of a sudden you're putting students in English class. And the English chair is saying, "Well, what's going on here; what is this all about?" So we had to do a little damage control.

This situation is typical if key faculty members are not kept apprised of what is coming out of the ECHS planning processes. ECHS courses often become add-ons to faculty members' existing course loads, and the additional responsibility can become onerous, particularly if faculty did not volunteer for the assignment.

Another challenge faced by some ECHSs is that the partnering colleges may have different visions for the initiative than the high schools do. Such contrasting perspectives can lead to programs that veer away from the ECHS vision. Some colleges put restrictions on who can take college classes and on the number of college classes in which high school students can enroll. A leader at one school stated, "My big roadblock is that [the community college] will only let students in who have a 3.2 GPA, and that to me defeats the Early College initiative, which is to expose all students to college classes. I don't want our kids to segregate themselves." In another example, the IHE partner (a flagship state university campus) limited the course sequence to include only one year's worth of college courses. A leader at the ECHS further believed that the university did not want to deal with remedial students and closed classes to them, a practice that interfered with their vision of becoming an access school.

Other reasons emerged for IHE reluctance to commit to their ECHSs. Some IHEs were uncertain about financial arrangements and compensation for their participation. This concern seemed especially pressing in the partnerships where IHE faculty had "not been given one dollar to do this work, and it takes a lot of time." This is an issue that ultimately can be resolved only through policy levers. However, at least one intermediary has revised its budget to allow monetary compensation for future community college partner agreements. This change is expected to result in making more college courses available to ECHS students.

Another reason for IHE hesitance stems from wariness about high school students' abilities. As one instructor noted, those with negative views are usually those who have not had exposure to high school students. Indeed, in several instances, interviewees spoke of how some higher education faculty changed their views after having high school students in their courses or seminars. Physical proximity—such as having ECHSs on college campuses—also has helped allay these concerns, as have deliberate efforts to encourage socialization and bonding among IHE and high school faculty. However, experience with high school students clearly is not enough to dispel all the skepticism. A leader at one community college said that the college could initially offer only 10 5-credit courses, based on his prior experience with elite high school students who were unable to reach sophomore standing. In another example, involving a 4-year higher education institution, the IHE has been adamant that it can accept credits for transfer only if the ECHS students take college-level courses taught by one of its faculty members, a policy at odds with the college's general transfer requirements.

Support of institutions of higher education is important to the overall development of the ECHS initiative. IHEs support the ECHS initiative in a range of ways, from sharing the vision to supplying resources and finally to implementing plans that work for both the high school and the IHE. When IHE support is lacking, especially in limiting access to college classes, ECHSs have a more difficult time turning their vision into a fully realized Early College program.

Co-Governance

The mechanisms of co-governance in place at ECHSs ranged from very little coordination to highly structured, collaborative partnerships. On the less coordinated end, an adaptation ECHS, despite being located on a community college campus, operated almost independently of its higher education partner. In this case, new leadership at the college openly expressed serious reservations about the Early College model and was in the process of withdrawing its support. A number of ECHS local partnerships were at the highly structured and collaborative end of the continuum. In these cases, responsibilities and roles were clearly defined, resources were often shared, and joint high school–IHE planning occurred frequently and regularly (usually on a monthly basis). Not surprisingly, several of these partnerships involved Middle Colleges (already located on the IHE campus) adapting to ECHSs. An interviewee at one of these schools reported that intensive joint planning among representatives from the high school and the community college began a full year before the school opened. Yet, even in sites with high collaboration and shared decision-making, schools and IHEs were still bound by their own policies and operational constraints, described in previous sections. Consequently, responsibility for policies such as hiring, grading, and pedagogy were not yet collaboratively defined and still tended to fall into separate college or K–12 domains.

Many local partnerships were, as one intermediary leader put it, "still a work in progress." For example, one ECHS, a program within a larger high school, had three IHE partners. Interviews with representatives of this local partnership suggested that roles and responsibilities of the different partner organizations were not yet clearly defined. The same was true for a number of the local partnerships during the 2003–2004 school year. In another case, the collaboration between a community-based organization, a high school, and a local community college was highly established but largely informal and drew on long-standing friendships between school leaders and the college president.

The three primary influences on co-governance at ECHSs are memoranda of understanding, advisory boards, and staff turnover.

Memorandum of understanding (MOU). The foundation and JFF intended every local ECHS partnership to be rooted in a written contract (e.g., an MOU) that clearly delineates the roles and responsibilities of each partner. In 2003–2004, leaders at JFF estimated that about half of the operational ECHSs had an MOU in place. Thus, there is considerable work still to be accomplished in this area. Many of the leaders and intermediaries interviewed believed that MOUs establish the foundation for co-governance by clearly outlining responsibilities. The director of the ECHSI for one intermediary acknowledged problems that have emerged at its first operational school in terms of delegating responsibilities because no MOU was in place in the first year: "[T]here is no detailed agreement about the arrangement, the money, who would provide what." Now this intermediary (as well as others) is requiring all of its local partnership IHEs to sign an MOU specifying who will do what.

Not all interviewees appreciated the structure that MOUs can provide. At one site, for example, the high school and the community college had a long-standing agreement in place, but a leader at the school saw that agreement as more fluid than a traditional MOU. According to that leader, the current agreement offered considerable latitude in decision-making, whereas an MOU that satisfied the intermediary's requirements would "cripple the process" by requiring advisory board approval for every decision.

Advisory boards. Advisory boards are another important co-governance mechanism. Several ECHSs affiliated with certain intermediaries (SECME, WWNFF, MCNC, and Antioch) were required to establish advisory boards. Usually, these boards included roughly equal numbers of representatives from the schools and the IHEs. The boards made decisions on a variety of issues related to their ECHSs. For example, one school's board had subcommittees on human resources, financing, curriculum, and student recruitment. Another advisory board, made up of administrators from the school district and the community college, decided that high school students could receive both high school and college credits for one course that was co-taught by a high school teacher and a community college instructor. However, at this point in the implementation of the ECHSI, several interviewees noted that the primary role of their advisory board has been first to refine the vision of the ECHS and then to develop a curriculum and course sequencing to mesh with that vision.

Participants generally shared positive views of their boards, citing their high degree of collaboration and productivity. At one ECHS, for instance, a leader said that, without the advisory board, "there would be no program." Despite their successes, however, advisory boards have also experienced some difficulties. As one example, the diversity of perspectives on the advisory board at a school initially posed challenges to developing a shared vision and, in turn, to making decisions about ECHS policies there. These differences notwithstanding, the board significantly shaped the direction of the school and continued to provide input and guidance. Along similar lines, the board at another school was slow to jell but started to function more smoothly and productively.

Staff turnover. The departure of key ECHS leaders and faculty (high school and college) also affected co-governance. In some instances, losing vital staff presented a considerable setback to the implementation of the ECHS because new roles, relationships, and visions had to be renegotiated.

Figure 7 includes an example of co-governance between an IHE and a local school district in implementing a new ECHS.

Figure 7. Example of IHE and District Co-governance

Destination ECHS is being developed through a partnership between a 4-year university and a large urban school district. The intermediary group involved targeted the provost of the university as a likely leader in spearheading the development of the partnership and in building support for the ECHS concept on the campus. (The provost previously had a close association with a blended school while serving at another institution.)

Destination opened to ninth-grade students in fall 2003 after a short, 6-month planning period during which the principal was hired, staff were identified, and students were recruited. The school has an advisory board, and this group was highly instrumental in allowing the fast start. Membership includes the provost (ex officio), a campus-based ECHS coordinator, four college faculty members, the principal of the ECHS (ex officio), one ECHS teacher, and the director of an institute housed on another college campus that encourages minority students to prepare for and attend college. This core group worked hard and collaboratively to ensure that the first year would be as smooth as possible. The ECHS coordinator and the principal, in particular, worked closely together on the day-to-day issues that arose in the school's initial year. Meetings of the advisory board would sometimes expand to bring more college faculty and administrators or ECHS staff into the circle of ECHS support. A weekend retreat during winter 2004 provided a particularly successful bonding experience, according to several respondents.

Policies

The policies affecting ECHS development included dual enrollment, NCLB, funding and financial aid, and multiple assessment systems.

Each level of government, from the local education agency to the federal government, establishes policies that all high schools, including ECHSs, must follow. Previous sections of this report have referenced ways in which local policies, such as assignment of students to schools or curriculum and testing, have an impact on how the schools are developing. In this section, examples of how some state and federal policies affect the establishment, implementation, and management of ECHSs are highlighted. An integral aspect of the current policy environment is the use of assessments to verify that schools improve student achievement; therefore, the final portion of this section highlights the assessments that most affect ECHSs. There are many large policy issues with significant implications for ECHSs. The policy issues discussed here are intended to highlight the wide variety of policies of concern to those "on the ground."

State Policies

The ECHSs in the 2003–2004 evaluation cohort were located in 12 states, and the particular education policies in these states influenced the implementation and management of the schools in a variety of ways. In general, state policies concerning the establishment and management of charter schools and rules governing dual student enrollment were supportive of the ECHSs. However, the state policies addressing credentialing and course sequencing tended to inhibit the implementation process.

Most state regulations allowed charter schools more autonomy in adhering to state policies than district-managed schools had. Approximately 25 percent of the 22 ECHSs were charter schools. The benefit of this status, as one school leader noted, was that "Using the charter school route was the only way to get the schools out of the rule making and bureaucratic entanglements of getting a new school started within a district." In California, where ECHSs affiliated with at least three intermediaries were charter schools, a school leader noted that the state "environment supports charters" and that being a charter allows the "greatest ability to implement" an ECHS model. Depending on state law, charter schools typically have more control over issues such as curriculum, budget, and staffing, all issues at the heart of building a new kind of high school.

For many ECHS students to be able to meet the goal of earning 60 credit hours, favorable dual enrollment policies are essential. Dual enrollment policies allow high school students to take college courses and have those courses count for college credit as well as high school instructional time. Some states, like Washington, had a program for high school students to enroll in community college classes that predated the ECHSI. An IHE administrator noted that the dual enrollment policy has allowed the college to "get past some of the artificial barriers like their [school system's] semester system and our quarter system." The administration of the dual enrollment policy differed across states with ECHSs. For example, in New York, the dual enrollment policy specified that postsecondary institutions control enrollment of secondary students in college courses and that these courses can be taken for dual credit. In California, the education code directed administrators in the school districts to set the policy for allowing students to take and receive dual credit for classes taken at a community college. For states without dual enrollment policies, the concern for ECHSs was typically the financing of college credits; for states with dual enrollment policies, there

has also been some backlash against the existing policy due to concerns about financing and the quality of the programs (Bailey, Hughes, & Karp, 2003).

Other state policies potentially limit the options available to developers of ECHSs. For example, state credentialing requirements typically require all high school teachers to meet all criteria for a teacher credential before being eligible for district hire and hence available to teach in an ECHS. Although the credential requirements differ in a variety of ways across states, earning a credential typically requires teachers to graduate from a teacher education program and to have met state teacher test requirements. Under some ECHS models, these credential requirements might prevent college faculty from teaching high school courses. So far, however, this potential barrier has not arisen in any of the operational ECHSs. The requirements for high school teachers to be eligible to teach a community college class are typically less stringent, usually requiring a master's degree or a certain number of graduate credit hours in a particular content area. Some ECHSs have designed their programs around these credential requirements. For example, as one ECHS principal noted, high school teachers teach the high school classes and the college instructors teach the college-level classes. If they team teach, they "always have the right person in the room."

Other recent changes in California state policies that have affected ECHSs include new limits on the number of high school students who can attend summer school at an IHE, and new caps on the number of students at the top state universities, which have had the side effect of increased enrollment at community colleges, thereby limiting class options for ECHS students. In the state policy context for the ECHSI, California is a particularly interesting case because several intermediaries are developing schools there. JFF and the intermediaries are discovering that a policy change that has a detrimental effect on one intermediary's work may have a beneficial effect or no effect for other intermediaries because of differences in the ECHS implementation models.

Although, as one ECHS leader put it, "state funding can be unpredictable," some ECHSs were able to use state funding or programs to support ECHS expenses. These programs included dual enrollment programs to cover high school students' taking college courses, individual development accounts (IDAs) to support any postsecondary educational expenses, funding for programs that do dropout retrieval, and funding for schools that are chartered by the state rather than by a district.

Federal Policies

In terms of federal policy, the most significant legislation affecting ECHSs is No Child Left Behind (NCLB). Of the law's regulations, intermediary and school staff most often discussed the provisions about highly qualified teachers. As one intermediary leader said, "I'm very aware of No Child Left Behind." He shared that they were working closely with the state board of education to determine how NCLB would affect the ECHSI and that they were pushing for policies that would be beneficial to the ECHSs. SECME, as a professional development organization, believed that one of its strengths was addressing the highly qualified teacher requirement of NCLB. A staff member at SECME noted that the organization has partnered with the National Board for Professional Teaching Standards and planned to make "some training available to all teachers in the Early College to be become eligible for National Board Certification through participation in SECME's summer institutes."

The other frequently mentioned regulation was adequate yearly progress (AYP). One aspect to determining AYP is the graduation rate, best measured by tracking the percentage of 9th-grade students who graduate in 4 years. Some ECHS models require students to complete a fifth year in high school to fulfill both high school graduation and A.A. degree requirements. ECHS leaders are concerned that the fifth-year graduations will have negative impacts on the schools' AYP. One principal noted, "Because our kids won't graduate in 4 years, we will be rated as a failing school…I am negotiating through the city to get an exception to the rule."

Another federal policy that is adversely affecting some ECHSs relates to undocumented students. Federal law prohibits illegal aliens from receiving federal financial student aid. A federal law passed in 1996 also prohibits illegal aliens from receiving state tuition rates at public IHEs. Yet some states, including several with ECHSs (California, New York, Washington, Texas), have passed state laws providing in-state tuition benefits to illegal aliens who have attended high school in the state for 3 or more years. The state laws circumvent the federal law simply by not asking students whether they are in the United States legally. A National Council of La Raza (NCLR) representative noted, "One of the challenges is a lot of students are undocumented. So even if they [the ECHSs] can get rigor up, even if they work the partnerships, now they are taking on the government."

Of course, one of the best-known aspects of NCLB is the increased use of achievement testing. The impact of the federal government mandate for assessment systems is addressed in the next section.

Assessment and Accountability Policies

Over the past decade, there has been a marked increase in the use of assessments for a variety of purposes. There is no observable trend for policy-makers to exempt special-purpose schools from required assessments. Since most ECHSs are public schools and all 40 states with charter school legislation require the students attending those schools to follow all state assessment mandates, ECHS students will be subject to the same assessment requirements as their peers.

The states with ECHSs administer a variety of assessments, and many carry high stakes for students. For example, Washington requires all students to earn a certificate of academic achievement, which is based largely on high school students' showing competency in reading, writing, math, and science and meeting the state standards in those content areas. Starting with the class of 2007, students in Ohio will also have to pass a graduation test to earn a high school diploma. Arizona also has graduation test requirements, and California has the High School Exit Exam. At this time, ECHS students will have to meet these state testing requirements to earn their high school degree. One KnowledgeWorks Foundation representative reported that one school was interested in getting a waiver from the testing requirements for ECHS students, but he disagreed, noting, "We feel like if they are performing, they should be able to take the [state assessment]…We feel like the [ECHS] students should have to meet some standard."

At the college level, assessments are also high stakes for the students. Since most ECHS students must take assessments before enrolling in college classes, the placement test results typically determine their course placement in reading, English, and math classes. ECHS students who do not earn the minimum score for the placement tests will not be eligible for enrollment in most of the courses required to earn an A.A. degree. Several placement tests are used by state community college

systems, such as the Accuplacer in Florida and Ohio, the College Assessment Test in California, and the COMPASS test in Washington.

ECHSs really have no choice but to participate fully in any assessments required by state and federal guidelines, particularly if participation is linked to funding. The results from local and state assessments are also typically used as an accountability tool to measure a school's performance in improving student achievement and for accreditation procedures. As one intermediary leader noted, for some ECHSs, "there will be multiple accountabilities that these schools are going to have."

Key Funding Issues

The data collection activities for this evaluation did not include an in-depth study of ECHS financing; that work will be done primarily by JFF. However, finances did come up repeatedly in interviews. Since funding is so clearly linked to ECHS success, this section covers some of the funding issues detailed by interviewees.

Funding College Courses

Many ECHSs worked out ways to cover students' college tuition, at least for now. In 2003–2004, many IHEs agreed to provide instruction for free or for very low fees. In almost all these cases, the courses took place on the college campus. One ECHS paid faculty a stipend of $500 when high school students enrolled in their classes. Another ECHS said that the IHE would charge for college courses only if a course was designated only for high school students; this school did not intend to use that option. As one school leader stated, some IHEs were just "swallowing" the tuition for high school students. This same leader noted that, as generous as it was, the free tuition was still not enough for very poor students; college courses required other expenses (such as textbooks) that were not covered.

Many ECHSs expressed concerns about the sustainability of the funding agreements currently in place. Although the school leaders were grateful to start the partnership with low or no fees, they did not believe that the IHEs could continue to make these offers in the long term. In fact, some of these deals were explicitly short term, while the schools found other sources of funding. One ECHS expected to cover tuition with a grant in the future. Schools have good reason to be worried; there is already an example of an IHE changing course. One IHE started out with an agreement that high school students would not pay for college courses; but once the IHE hit some difficult financial times, it started to charge students for courses.

Several other ECHSs started out paying for college instructors to come to the high school to teach courses. This approach is used by the model ECHS, which in part inspired this initiative, where college faculty are hired by the school to teach college courses. Some schools with this model saved some funds by relying on instructors with both college and high school credentials to teach both types of courses.

Inadequacy of Foundation Funding

Many ECHSs still felt underfunded by the foundation. One ECHS might leave the initiative because, in addition to questioning several key principles of the initiative, it received much larger grants from

other sources. Several sites had concerns that the district would shut down the school because the funding level was so low. It has not happened yet, but that experience left those involved concerned for the future. One intermediary representative said that when IHE representatives find out the funding amount is about $1,000 per student, "They go, 'Not a year?' It's not. It's almost nothing." Such was the concern that the evaluation team received funding requests from ECHS representatives to pass along to the foundation. Several intermediaries have approached or plan to approach the foundation for additional funding.

Sustainability

At this early stage in the initiative, most ECHSs were concerned with getting started rather than staying open. However, some intermediaries and school leaders talked about the long-term viability of their ECHSs. One school leader spent considerable time working out the financing details and was "amazed it could actually work." Some ECHS leaders had concerns about their schools' longevity, given that the model is "a very expensive proposition." Many ECHS leaders noted that expenses that were covered by grant money would soon need to be covered some other way, but the details had not been worked out yet. These leaders expected that IHEs would have to contribute more funds or students would have to start contributing toward their tuition for college courses. Several leaders noted that they thought the real solution to ECHS sustainability would necessitate policy changes at the state and national levels. They particularly remarked on changing high school funding formulas, getting ECHS students access to state and national financial aid programs, leveraging Title VII funds, and using Perkins demonstration funds to pay for college courses.

Summary

A large number of organizations are involved in the creation of ECHSs. All of these organizations strive to support the ECHSs, with varying levels of success. JFF influences the entire initiative through its policy work, technical assistance and networking activities, and accountability functions. Intermediaries bring local partners together to create the ECHS, at times mandating certain school characteristics. Although intermediaries differ in their approach to supporting the developing schools, most provide some form of technical assistance, assist with the relationships between partners, and facilitate communication between schools. Although they come with their share of bureaucracy, districts have been largely active and helpful partners in ECHSs, providing pools of instructors, facilities, and technical assistance. Largely new to collaborating with high schools, IHEs have partnered with the ECHSs with varying degrees of commitment. Of particular concern is getting IHE faculty to believe that it is possible for high school students to be successful in a significant number of college classes. Finally, both national and state level policies affect the ease with which ECHSs can cross the secondary–postsecondary divide. A particular policy issue for the ECHSI is the establishment of funding mechanisms to facilitate seamlessness between educational sectors.

Chapter VI. Current Findings and Future Work

This first annual evaluation report on the Bill & Melinda Gates Foundation's Early College High School Initiative has focused on the development of the initiative in its earliest years. Three years ago, there was a single model Early College High School in the entire nation. In 2003–2004, in the ECHSI alone, there were more than 20 of these schools that plan to blend 4 to 5 years of high school and college courses so that poor and minority students graduate with both a high school diploma and 2 years of college credit at public expense. The expectation is that in 5 years the foundation's ECHSI network will encompass up to 175 schools, each serving about 400 students of traditional high school age, with many also reaching down into the middle grades with "ECHS prep" programs.[12]

The descriptive information presented in this report suggests that the ECHSI has set itself a challenging course. Philosophically, the initiative is committed to serving populations that have traditionally been underrepresented in postsecondary education, and all the evidence is that the first ECHSs did indeed recruit and enroll students who were representative of the targeted groups: minorities, immigrants, English language learners, potential dropouts, and the economically disadvantaged. The initiative is also committed to offering a rigorous, blended high school/college curriculum that is developed through partnerships between IHEs and local providers of secondary education. The evidence on both partnership and program development so far is that they take considerable time, effort, and technical assistance. In addition, the central tenet of the ECHSI—offering an accelerated educational program to all enrolled students—sets up an essential tension, particularly at the ninth-grade level, where the early experiences of the ECHSs show that many students arrive underprepared for high school courses and unprepared for college courses. Finding satisfactory resolutions to this tension will be key to whether the ECHSI can meet its long-term goals.

Nevertheless, the ECHSI has already achieved much in a short time. The data presented in this report have highlighted several notable accomplishments of the initiative:

- Twenty-two ECHSs have opened and are serving approximately 3,500 students, primarily from racial and ethnic minority groups and from low-income families.
- The 10 intermediary groups profiled have established many local partnerships that are at various stages of development. The intermediaries are learning how to nurture and solidify these local relationships.
- With the foundation, the "coordinary" (Jobs for the Future) has developed an accountability plan to help the intermediaries track the progress of local partnerships and ECHSs.
- Most ECHSs are making good-faith efforts to create environments for teaching and learning that are characterized by the key attributes of high-performing small schools endorsed by the foundation. Attributes that are particularly important to the success of an ECHS are (a) adequate academic and social supports that will allow students to accelerate through high school and earn 60 college credits and (b) the establishment of a college-going culture in which all students view themselves as college material.

[12] The evaluation team is aware of other schools that have adopted the name "Early College" but are not officially affiliated with the ECHSI.

- Most of the operating ECHSs devised strategies to introduce even ninth-grade students to college courses and/or a college campus.

The 22 ECHSs that had enrolled high school students by 2003–2004 and the various partner organizations that helped them open are true pioneers. It is important to recognize the enormous amount of energy and problem solving that went into bringing the ECHSI to this point. A tremendous amount of work has been accomplished. Needless to say, however, many hurdles remain as the initiative continues to grow. Issues that seem particularly important at this stage of the initiative's development include:

- Refining and streamlining the capacity of intermediaries, especially those with national ECHS networks, to continue to develop new local partnerships while simultaneously supporting the existing schools.
- Ensuring that every local partnership is rooted in a written and signed agreement (memorandum of understanding or other type of contract) that clearly specifies the responsibilities of every partner involved with an ECHS's development.
- Intensifying efforts to lobby for ECHS-friendly national, state, and local policies, specifically policies that will provide stable funding and improved physical facilities for the schools.
- Broadening the base of support for the ECHS among faculty and administrators at each of the participating IHEs, but particularly at 4-year institutions.
- Engaging both high school and IHE faculty in professional development that focuses on student-centered teaching and learning and the development of diversified instructional strategies.

In 2004–2005, the national evaluation moves into its third round of data collection. Most activities will mirror those of 2003–2004 but with an expanded population of ECHSs and intermediaries and with some change in focus. The evaluation team will interview all intermediaries (currently 13 entities) about how their work is going, how they think their schools are doing, and their future plans. We will again administer a school-level survey to all ECHSs that are open (about 50 in all). The survey will request information about student demographics, attendance, and application processes. In addition, items will be added to focus on factors such as admission requirements, college course participation, and types of student support services.

In 2004–2005, the survey will be the only evaluation activity to include all operational ECHSs. The two remaining activities, site visits and ECHS leader 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, plans for integrating college courses, how students are doing and how they feel about the school, the types of instruction used 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).

With respect to intermediate and summative student outcome data, one of the potentially most informative data sources for this evaluation will move closer to becoming a reality during 2004–2005. The Student Information System (SIS), a data management system being overseen by JFF, will be piloted with a few ECHSs during winter–spring 2005. When the pilot database is ready, the evaluation team will pilot-test data analysis methods, such as determining students' course loads and

coding courses to allow for cross-school comparisons. However, the annual report covering 2004–2005 data will not include any formal analyses based on the SIS. The full rollout of the SIS is expected to occur in fall 2005 and will be part of the evaluation's 2005–2006 work. When fully developed, the SIS should provide information regarding students' high school and college credits completed, grades received, achievement scores, and degrees/diplomas earned.

At different points in the evaluation, particular research questions will receive more emphasis in both data collection and reporting. In 2003–2004, the evaluation focused heavily on simply describing the basic characteristics of the ECHSs and of the initiative overall. In 2004–2005, the evaluation will place greater focus on the attributes of high-performing small schools, including school climate and culture and what happens in classrooms. We will also deepen our understanding of the partnerships that support the ECHSs at all levels of the initiative and continue to describe and analyze factors that assist or hinder ECHS implementation.

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