EARLY COLLEGE EXPANSION PARTNERSHIP:  
VALIDATING THE EARLY COLLEGE HIGH SCHOOL DESIGN IN TWO REGIONS

TABLE OF CONTENTS

Introduction; Absolute and Competitive Preference Priorities........................................... 1

A. Quality of the Project Design .......................................................................................... 3
   1. Goals, Outcomes, Objectives, and Actions................................................................. 3
   2. Incorporation into Ongoing Work ............................................................................... 11
   3. Reasonableness of Project Costs ............................................................................... 12
   4. Estimated Cost of the Project.................................................................................... 13

B. Significance ................................................................................................................... 14
   1. An Exceptional Approach ......................................................................................... 14
   2. Services that reflect Up-to-Date Knowledge from Research and Effective Practice .... 16
   3. Importance and Magnitude of the Effect .................................................................. 18

C. Quality of the Management Plan and Personnel ........................................................... 20
   1. Management Plan .................................................................................................... 20
   2. Qualifications of Project Director and Key Personnel ............................................... 25
   3. Capacity of ECEP Partners to Scale ECHS Designs .................................................. 27

D. Quality of the Project Evaluation ................................................................................... 29
   1. Well-Designed Quasi-Experimental Study To Determine Impact ............................. 31
   2. High-quality Implementation Data and Performance Feedback ................................ 34
   3. Information on Key Elements/Approach to Facilitate Further Replication or Testing ... 36
   4. Sufficient Resources and Very Qualified Staff.......................................................... 37

Bibliography
INTRODUCTION; ABSOLUTE AND COMPETITIVE PREFERENCE PRIORITIES

The Early College Expansion Partnership (ECEP) partnership, led by Jobs for the Future (JFF), proposes to scale the Early College High School (ECHS) design in two fast-growing regions with high numbers of low-income and Hispanic students – the Lower Rio Grande Valley in South Texas, and Denver, Colorado. The ECHS design – confirmed through rigorous study as significantly increasing the success of underrepresented and high-need students in demanding college-preparatory programs of study – features four core ECHS Design Elements: 1) an engaging college-ready academic program, including a coherent instructional framework aligned to college-ready standards; 2) a head-start on college, including college course-taking, that both challenges and inspires students; 3) comprehensive wraparound student supports; and 4) organizational practices that sustain these reforms. JFF and its ECEP partners – the Pharr-San Juan-Alamo (PSJA) and Brownsville Independent Schools Districts (ISDs) in the Lower Rio Grande Valley (the LRG Valley); Educate Texas (EdTX), a public-private school development initiative of the Communities Foundation of Texas; and the Denver Public Schools (DPS) – will scale this proven design as an “early college for all” strategy to reach an additional 30,000 students. In doing so, ECEP will draw upon JFF’s comprehensive technical assistance and professional development platform refined over the past decade as JFF has worked with state and local partners (including EdTX) to expand the ECHS design to 270 schools nationwide.

ECEP’s scaling of the ECHS design squarely addresses Absolute Priority 3 – Innovations that Complement the Implementation of High Standards and High-Quality Assessments by implementing high standards and high-quality assessments that measure student progress toward college and career readiness and that improve education outcomes. The design – a comprehensive reform effort in which students complete at least 12 and up to 30 college credits while in high school – requires districts and schools to align their academic program with state
standards for college readiness and rigorous standards set by postsecondary partners for college course completion. ECHS’s employ high-quality formative assessments aligned with college-ready standards and provide multiple opportunities to assess progress and readiness to begin college-level work. ECHS’s translate college-ready standards and data from aligned assessments into classroom practices that meet the needs of all students, particularly high-need students.

**Competitive Preference Priority 7 – Innovations that Support College Access and Success:**
The ECHS design prepares high-need secondary school students for success in postsecondary education. The design addresses students’ preparedness and expectations through access to: a college-ready academic program that includes an instructional framework aligned to college-ready standards; an aligned sequence of college courses and supports as part of the high school program of study; and significant exposure to the culture and norms of college. The design helps students understand issues of college affordability and provides comprehensive college application and financial aid advising and assistance. It provides support from peers and adults through wraparound academic supports (including tutoring and academic advising) and a strong college-going school culture that establishes an expectation that all students will successfully prepare for, enter, and graduate from college.

**Competitive Preference Priority 8 – Innovations to Address the Unique Learning Needs of LEP Students:** The ECHS design features innovative practices and supports that increase academic outcomes of LEP students. Teachers are trained to implement a common instructional framework that emphasizes literacy-rich classroom practices such as collaborative group work, writing-to-learn, and oral inquiry and questioning strategies, which research has shown to support achievement gains for LEP students (Alliance for Excellent Education). The design includes tutoring and supplemental instruction in challenging pre-college and college courses,
academic advising, and immersion in a college-going culture. Indeed, with higher GPAs and persistence than other ECHS students, evaluators have concluded that students from homes where a language other than English dominates “appear to be thriving in early college schools – perhaps more so than any other subgroup.” (AIR/SRI, 84). With such practices and supports, ECEP will address the unique learning needs of sizeable LEP populations in all three districts (34% in Denver, 41% in PSJA, and 33% in Brownsville).

A. QUALITY OF THE PROJECT DESIGN

1. GOALS, OUTCOMES, OBJECTIVES, AND ACTIONS

Goals. The ECEP will advance start-up and scale-up efforts in three LEAs (Pharr-San Juan-Alamo ISD, Brownsville ISD, and the Denver Public Schools) in order to increase adoption of the ECHS design – an innovation with a proven record of improving student achievement and closing achievement gaps for high-need students – by LEAs within and beyond two of the fastest growing regions in the country. With large numbers of low-income and Hispanic students, the LRG Valley in South Texas and the Denver region in Colorado are emblematic of the nation’s changing demographics. By successfully scaling up early college efforts in these districts, the partnership will create exemplars for future expansion by LEAs, neighboring and nationally, that increasingly resemble them. During the five-year grant period, the partners plan to work with 22 high schools and feeder middle schools in the three LEAs, reaching 30,000 students in Texas and Colorado. ECEP has two primary goals that will increase student achievement and close achievement gaps for high-need students in these regions.

Goal 1: Scale up ECHS designs within high-growth regions of Texas and Colorado, building on the experience of LEAs in these regions and their commitment to use ECHS as a district-wide secondary school improvement strategy and college readiness/success strategy for all.
Although at different stages in implementation, each ECEP district and region is engaged in strategic initiatives to substantially expand the reach of early colleges. In the LRG Valley, PSJA has expanded the “early college for all” design from a single site to several of its secondary schools over the past two years. PSJA will continue work with JFF and EdTX to extend early college to its remaining secondary schools. In Brownsville ISD, the LEA will work with JFF and EdTX to expand from its single early college school to nine other schools reaching nearly half of the district’s secondary school students. Driving efforts in both districts will be JFF’s ECHS technical assistance and professional development platform, which has successfully supported implementation of the ECHS instructional framework in over 100 schools over the past five years. JFF and EdTX will jointly provide technical assistance and implement the professional development platform in PSJA and Brownsville, building upon their seven-year partnership that has already expanded the early college design to almost 50 high schools across Texas.

In Denver, ECEP will tackle district-wide reform in an LEA with nearly 30,000 secondary school students. DPS’ longtime support for an early college school and for substantial dual enrollment opportunities for high school students create a strong foundation for making early college the “default” course of study for all secondary students. DPS will spread early college through its five-network regional structure that covers the entire city. Each network will create at least two early college schools, and together will reach about a third of all secondary school students in the city. As DPS’ direct school development partner, JFF will deliver comprehensive design and implementation technical assistance to DPS, and partner with DPS on implementation of JFF’s professional development platform, to support early college scaling in each network.

**Goal 2: Position ECHS designs for sustainability in the three LEAs and establish these districts as exemplars further scale-up within their regions, statewide, and nationally.**  

ECEP
partners will build the capacity of all three districts and schools to sustain implementation of ECHS designs beyond the grant period. In the LRG Valley, this will include building district capacity to implement the ECHS professional development platform and strengthening central office functions to implement, improve, and sustain the design. This will also include efforts by EdTX to deepen support at the local and state levels to sustain and expand the ECHS strategy throughout the Valley. Further, JFF (drawing on its experience creating ECHS demonstration sites in Massachusetts, Ohio, and North Carolina) and EdTX will work together to prepare PSJA to become a fully implemented early college district that can be used as a demonstration site for other districts in the region and state, where they can observe and understand how to replicate the ECHS Design Elements. In Denver, JFF will use its national ECHS experience to build capacity within the central office, among the instructional superintendents and coaches in each of the five networks, and at each of the early college schools, to sustain the design and expand it beyond the grant to other secondary schools within DPS’s five regional networks.

The ECEP will also document strategies and lessons across the two regions to inform future district-wide scale-up efforts as well as the launch of ECHS networks in additional states. This will include design briefs and case studies focused on critical topics of implementation and sustainability such as district-wide early college financing models for covering college course costs and the use of data to support instructional improvement in the transition from high school to college. JFF is committed to leveraging its current projects and future initiatives to reach national networks of LEA leaders and state policymakers and will target this audience to disseminate outcomes and best practices from the ECEP.

Outcomes. During the five-year grant period, we anticipate the following outcomes:

- A total of 30,000 students served by schools adopting the ECHS design;
- Higher rates of achievement among ECEP students: at least a 10 percentage point increase in students taking and succeeding in core college preparatory courses;
- At least a 10 percentage point higher rate of graduation than comparison group students;
- At least 90% of high school graduates completing college courses transferable to postsecondary degrees or credentials; and
- A blueprint for district-wide ECHS expansion that can be used by other LEAs, particularly in regions with demographic characteristics and growth similar to Denver and the LRG Valley.

**Strategy, Objectives, and Actions.** Figure 1 below summarizes the design and logic model for this project, including the ECEP activities, design elements, and projected student outcomes.

### FIGURE 1

<table>
<thead>
<tr>
<th>ECEP Activities</th>
<th>School-Level Implementation of Design Elements</th>
<th>Intermediate Student Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical assistance to districts regarding:</td>
<td>College-Ready Academic Program:</td>
<td>Approximately 30,000 students participating in early college model</td>
</tr>
<tr>
<td>Strategic planning</td>
<td>• A coherent instructional framework aligned to college-ready standards</td>
<td>10 percentage point increase in students taking and succeeding in college preparatory courses</td>
</tr>
<tr>
<td>Implementation of Design Elements</td>
<td>• Engaging instructional practices</td>
<td>10 percentage point higher rate of graduation than comparison group students</td>
</tr>
<tr>
<td>Development of college-school partnerships</td>
<td>• Rigorous untracked academic program</td>
<td>90% of students have received some college credit</td>
</tr>
<tr>
<td>Design of aligned courses of study</td>
<td>• Strong post-secondary partnerships</td>
<td>Long-term Student Outcomes</td>
</tr>
<tr>
<td>Design of support systems</td>
<td>• Aligned sequence of college courses and supports</td>
<td>Increased enrollment and success in postsecondary education</td>
</tr>
</tbody>
</table>

As indicated in Figure 1, the JFF technical assistance and professional development platform (the ECEP activities in the first column) will be delivered in the ECEP districts to ensure strong implementation of the four ECHS Design Elements. These well-honed activities and services,
tailored to the appropriate stage of implementation, include:

- Up-front **design consultation** and technical assistance to districts and college partners on implementation of core design elements. Assistance will focus on: instructional program design; defining roles and responsibilities of the district (including new operational, staffing, and financial models and frameworks); college and community/business partnerships; curriculum development; data sharing requirements; and budget development.

- A comprehensive **professional development** program – a three-year sequence of instructional leadership, coaching, trainings, and support services that has shown success at driving implementation of a college-ready academic program for all students. The program, delivered through DPS’ central office and EdTX with the assistance of JFF, enables practitioners and leaders to implement and sustain a coherent, consistent, and research-based approach to instruction – the **Common Instructional Framework** – that accelerates students to a college-ready standard. Professional development will also include a **community of practice** for schools, districts, colleges, and partners that will facilitate knowledge sharing within and across districts and regions and create a platform for disseminating resources that spur and support further expansion nationally. With JFF’s assistance, EdTX and DPS will support peer learning within their districts. Cross-regional peer learning – through occasional in-person and more frequent sessions using technology, including webinars and an extranet – will provide LEAs with the benefit of lessons from implementing early college in different state and local policy contexts. Through documentation and dissemination efforts, ECEP partners will also provide opportunities for other LEAs and states to learn about early college expansion efforts and the platform of services, resources, and tools being created.

**Goal 1 - Scale Early College Designs in Districts within High-Growth Regions**
**Objective 1.1.** Scale ECHS designs in two districts in the LRG Valley, including one district that is expanding ECHS to all its secondary schools and another that is embarking on a district-wide scale up based on the success of its original early college high school.

**Objective 1.2.** Scale ECHS designs across DPS, the largest district in the fast growing Denver region by working through its regional management structure to launch ECHSs in each of its five networks that can later be replicated in other schools within each respective network.

**Actions.** The proposed cohort of three scale-up districts across the LRG Valley and Denver regions provide the opportunity to apply and validate the early college design to new contexts in two of the nation’s fastest growing regions that serve low-income, high-need students. Brownsville serves approximately 50,000 students, PSJA serves over 30,000, and Denver Public Schools serves nearly 80,000. Districts have been selected based on a process confirming the support of key stakeholders and their commitment to adopting the ECHS Design Elements. Each will draw upon their experiences with developing early colleges, and from JFF’s and EdTX’s national and state expertise, to guide expansion of the design across the district.

In the LRG Valley districts, the ECEP will convert several high schools and their feeder middle school(s) to an early college design over the five-year grant period, laying the groundwork for making early college the default course of study for all secondary school students in the district. A projected total of about 20,000 secondary school students across these districts will be enrolled in new early college programs of study by the end of the five-year grant period. Hispanic students comprise 99% of students in both districts, with 88%-95% of all students classified as “economically disadvantaged” by the Texas Education Agency.

EdTX and JFF will provide comprehensive technical assistance and deliver the ECHS professional development platform. This will include: working with district leadership and their
college partners to develop a strategic plan for the expansion effort; technical assistance in designing the courses of study, support systems, and school-college partnerships; using established early college school as exemplars, facilitating cross-district peer-learning; and delivering the ECHS professional development platform to ensure that new schools have the instructional coherence needed to help students become college ready and complete college courses by graduation. This is an approach that has been effectively used in JFF and EdTX’s work to expand early college in both a rural, smaller district with 3,500 students (Hidalgo ISD) and for about half of secondary schools to date in PSJA.

In the Denver region, ECEP will scale the early college design in Denver Public Schools, a large district with a majority minority student population (58% Hispanic and 14% Black) and with a 72% free and reduced price lunch rate. DPS and JFF will work closely to develop and execute a strategic plan for implementing intensive design and professional development support. Two schools, a high school and feeder middle school, from each of Denver’s five regional school networks will transform into an early college design, providing early colleges that can anchor future growth in every region of the city.

JFF will work closely with district and school leadership to develop implementation plans, design courses of study, support systems, and school-college partnerships, and deliver the early college instructional and professional development platform to ensure instructional coherence. With JFF’s assistance, DPS will engage each early college’s core implementation team from across its five networks in structured, facilitated peer-to-peer exchanges and site visits. Through delivery of these services, DPS will successfully convert 10 schools to an early college design, serving over 10,000 new students by the end of the grant period.

**Goal 2 - Position the ECHS design for sustainability and for further scaling**
Objective 2.1. Strengthen district capacity to sustain and expand ECHS implementation.

Objective 2.2. Document implementation and create demonstration site to support future strategies for scale-up in districts, regions, and states.

Actions. ECEP’s prior work on scaling early college has required visionary district leadership with a strong history of undertaking successful secondary school reform. The ECEP partners recognize that districts must develop the capacity to sustain these reforms beyond the term of the i3 grant. To that end, ECEP expansion activities will strengthen district-level administrative functions needed to implement the early college design and raise achievement to college-ready standards in a cost-effective manner. This work will include: building data and assessment systems that track student progress to college readiness, developing formal processes for using student data to refine instruction, restructuring curriculum sequences and student supports around the ECHS design and college-ready standards, developing and maintaining college and community partnerships, and creating district-based capacity to implement and sustain the early college professional development model by building a corps of coaches who support and monitor implementation of engaging, inquiry-based, and data-guided instruction in classrooms.

To inform future replication of ECHS in the LRG Valley and Denver regions and beyond, JFF will document the scale-up process in the three districts, as well as the unique factors in the states or regions that facilitate or hinder scale up. This will build on JFF’s long track record in documenting ECHS implementation nationally, capturing lessons on issues such as start-up costs, financing college courses, support systems that enable students to get ready for and succeed in college credit-bearing courses, and family and community engagement strategies. This documentation will have a ready and influential audience throughout the LRG Valley and other districts in the Denver region, where there is interest in future scale-up. In addition, in the Valley,
JFF and EdTX will work with district and school leadership to establish PSJA as an ECHS demonstration site, where leaders and practitioners from other districts can gain a first-hand understanding of the ECHS Design Elements to accelerate replication.

As a well-established national organization, JFF will also cite ECEP efforts in national networks as an example for other next-generation districts replicating in fast-growing and high-need regions, building knowledge to accelerate the scale up of best practices nationally. JFF and its partners will share documented learnings from this project through submissions to peer-reviewed journals (e.g., Journal of Research of Educational Effectiveness, American Educational Research Journal, Harvard Educational Review), education trades (e.g., Education Week, District Administration, Educational Leadership), and high-profile conferences as well as production of independent publications and online resources. Also, JFF will conduct webinars during the grant period (at least five) and afterwards to share lessons learned and outcomes from this project.

2. INCORPORATION INTO ONGOING WORK

All the ECEP partners are dedicated to providing high-need students with college ready skills and access to postsecondary educational opportunities. For JFF and EdTX, implementing and scaling early college designs has been an integral part of this mission for 10 and seven years, respectively. Each LEA partner has committed to scaling early colleges district-wide by the end of the grant period while establishing the platform for further in-district expansion and scaling across their respective regions.

Through the proposed activities, JFF will refine and strengthen the suite of design and professional development services that are so integral to successful early college designs so that by the end of the project period, an enhanced platform of ECHS services will be available for delivery to existing and new ECHS districts. In addition, extensive documentation and
codification of service delivery methods and the technical assistance process will provide JFF and its partners with a wealth of tools and resources to assist existing and new schools, districts, and states developing and scaling early college designs.

At the school level, the professional development platform used by JFF, EdTX, and DPS will institutionalize best practices for implementing an early college design and build capacity to sustain the proposed activities beyond the grant period. Further, the ECEP intends to reduce schools’ dependence on external instructional coaching support by creating an early college instructional coaching “endorsement” available to teachers at each school.

At the district level, JFF and EdTX will support the districts to develop the capacity to sustain these reforms beyond the term of the i3 grant. As described above under Goal 2, they will work with districts to strengthen the central office functions needed to implement the early college design and raise achievement to college-ready standards in a cost-effective manner.

Finally, lessons from ECEP will be incorporated into (and spread by) JFF projects aligned with ECEP activities. JFF continues to tie together the nearly 270 schools in the national ECHS network through data and knowledge sharing, providing a platform for sharing ECEP lessons. JFF also has received foundation funding to form a national network of 30 districts and college partners to create pathways grounded in high standards and assessments and linked to automatic completion of gatekeeper, introductory college courses in math and English. Finally, JFF does policy work in several states and at the federal and national levels to promote policies that build stronger pathways within high schools and colleges and between them, so that more high-need students complete a postsecondary credential.

3. REASONABLENESS OF PROJECT COSTS

At a per student cost of approximately $500 (less than 5% of the average public educational
expenditure per student per year), this project will dramatically increase the success of 30,000 high-need students in meeting college-ready standards. Even more significant are the future benefits for these high school students, their families, and their communities. By achieving a 10% increase in high school graduation rates, this project will ultimately produce 3,000 more graduates per year. With a financial lifetime benefit of a high school degree estimated at least $117,000 per student, this increase will result in $351 million more dollars in total earnings for the impacted students, and an extra $139,000 in tax revenue per student (Levin et al, 2006).

Additionally, studies have shown that early college schools are a cost-effective proposition for states because they reduce the expense of remediation in college for students who are not college-ready. With the help of school finance experts, Augenblick, Palaich and Associates, JFF has modeled the cost-benefit to states graduating more students college-ready. One analysis showed that students who have graduated from an early college in Texas with an average of 40 college credits will save the state an estimated $6,800 per student completing an Associate’s degree and $10,500 per student completing a Bachelor’s degree (Jobs for the Future, 2011).

4. ESTIMATED COST OF THE PROJECT

The ECHS model is designed to operate, beyond start up, at the same cost per student as a district’s current expenditures on its secondary school students. JFF estimates start-up costs ($16.5 million i3 award minus evaluation costs divided by 30,000 students) to be approximately $500 per student over the five start-up years for expansion of ECHS designs. The bulk of this one-time cost covers intensive summer and after-school professional development and specialized on-site coaching to support the implementation of the ECHS instructional program. Based on ECHS expansion achieved during the past 10 years, our expectation is that the per-student cost to expand ECHS designs to other districts will be reduced beyond the grant period as
we make our services more efficient based on experience from this effort. Start-up costs have already been reduced 20 percent since early college schools started in 2002-03. And we expect to achieve at least this much greater efficiency in the future because of economies of scale that can be achieved in regional scale up efforts. Thus, as the ECEP further scales its efforts, we estimate the five-year start-up costs to be no higher than $400/student (80% of current cost of $500/student), making the total cost $40 million of reaching 100,000 students, $100 million of reaching 250,000 students, and $200 million of reaching 500,000 students.

B. SIGNIFICANCE

1. AN EXCEPTIONAL APPROACH

The ECHS design and this project are exceptional in that they seamlessly integrate high school and college and propel under-represented student populations to success in an academically rigorous program that includes college courses. Early college has a record of increasing student achievement, decreasing drop-out rates, and building momentum to and through college. In fact, the ECHS design approach enables low-income students to achieve milestones towards college completion at rates that far exceed national and local averages (JFF, Early College):

- **Graduation rates:** 93% of EC students graduate from high schools compared to 76% of students in their respective districts.
- **College credit attainment in high school:** By graduation, EC students earn 23 college credits on average, and 56% of 2011 graduates earn two years of credit or an AA degree.
- **College enrollment:** 72% of EC students enroll in postsecondary education compared to 55% of students at schools with a majority of students receiving subsidized lunch.
- **Persistence rates:** 82% of EC graduates persist to their second year in college compared to 69% of low-income students or first-generation college goers nationally.
Moreover, the ECHS design, and the ECEP expansion efforts are exceptionally suited to advancing efforts to implement high standards and high-quality assessments that measure students’ progress toward college- and career-readiness: 1) ECHS is a **proven model** (see Appendix D) for preparing high-need students to complete demanding college preparatory courses of study. 2) ECHS is a **comprehensive reform effort** in which students complete at least 12 and up to 30 college credits while in high school, and accordingly requires districts and schools to align their academic program with state standards as well as more rigorous standards adopted by a postsecondary partner for completion of college courses. 3) ECHS is an **innovative approach** that deviates from the traditional high-school seat-time model and accelerates students to college-ready standards and coursework in an efficient manner. 4) ECHS implementation **roots school practice in high standards and high-quality assessments**: ECHS’s use formative assessments aligned with college-ready standards; provide regular administrations of college placement tests so students can assess progress and readiness to begin college-level work; and translate college-ready standards and aligned assessments into classroom practices that meet the needs of every pupil. This work requires negotiation and collaboration on standards and assessments across K-16, of critical importance as Common Core and other college-ready standards are implemented. 5) The ECHS model is **cost-effective**: most students enter college with transferable credits, reducing the credits needed to graduate and increasing their likelihood of completing a degree. 6) ECEP’s partners are **well positioned for expansion** activities.

Additional evidence from nearly 270 existing early colleges demonstrates that the ECHS design and this proposal are consistent with and will advance ED’s i3 priorities. Specifically:

*The ECHS model serves high-need students who are underrepresented in academically rigorous programs.* The target population for early colleges is students who have been
historically underrepresented in college, including students who are the first in their family to go to college and low-income and minority students. During the 2010-11 school year, 79% of ECHS students were students of color, and 61% were eligible for free or reduced lunch, a conservative estimate of students from low-income families (JFF). Nearly half will be the first in their families to attend college (Webb and Mayka). The LRG Valley and Denver regions also have high need student populations. In PSJA and Brownsville, 99% of students are Hispanic and between 88-93% of all students are classified as economically disadvantaged by the Texas Education Agency. In Denver, 72% of students are Hispanic or Black and 72% qualify for free or reduced lunch.

*ECHS designs are increasing the success of high-need students in rigorous academic programs.* A 2009 AIR/SRI evaluation study found that early colleges consistently outperformed district schools on state assessments by an average of 7 percentage points, and since 2002, more than 70,000 early college students have graduated with college credits and a head start on their postsecondary education. The 2009 AIR/SRI evaluation report showed that ECHS designs are particularly valuable for students from homes where a language other than English dominates, as these students ranked significantly higher on scales of academic interest and persistence and reported higher high school GPAs than other early college students. This finding is particularly relevant for the ECEP regions, as the LRG Valley and Denver have large and growing numbers of English language learners.

**2. UP-TO-DATE KNOWLEDGE FROM RESEARCH AND EFFECTIVE PRACTICE**

The early college high school design is one of the most successful reforms for increasing the success of underrepresented students in rigorous college preparatory programs. Since 2002, early college schools have achieved a record of success in increasing student achievement, high school graduation rates, college enrollment, and college credit attainment. In the implementation
of this design in schools and districts, JFF employs practices that reflect the most up-to-date knowledge from research and effective practice:

**Successful Secondary-Postsecondary Bridging.** The ECHS design’s efficacy is supported both by large-scale evaluations (see Section 3. Importance and Magnitude of Effect and Appendix D) and by leading researchers focused on strategies for improving the transition from high school to and through college. ECHS is cited as an effective strategy for all students, particularly low-income and other under-represented students, not only because their academic standards align to college-readiness but also because they focus on other aspects of “College Knowledge” (e.g., academic behaviors, navigational skills), which is a function of how they embed college academic expectations, norms, and counseling into high school (EPIC/Conley, Rosenbaum). JFF’s services are well aligned with research-based practices for such college bridging strategies, such as aligning instruction with the Common Core and other college-ready standards, assessing college-readiness, and integrating high school and college systems (What Works Clearinghouse, Tierney et al, Dynarski, et al.).

**Embedded Professional Development and Coaching.** An integral part of the ECHS design is ongoing professional development and coaching support for teachers, administrators, and district officials to enhance instruction and supports so that all students are prepared to a college-ready standard. Research shows that high-quality job-embedded professional development and coaching improves instructional capacity, implementation of effective instructional strategies, and leads to increased student achievement (Neuman, S.B. and Cunningham, Joyce and Showers; Neufield and Roper; Poglinco et al). JFF has provided such services to over 100 early colleges with strong results (see Appendix D), and has had success in increasing the academic performance of students at schools that target off-track youngsters (Le and Allen).
Common Instructional Framework. A key feature of JFF’s training model is a common instructional framework that prepares all students for college-level work. This framework incorporates six high-engagement research-based instructional strategies: collaborative group work, writing to learn, literacy groups, questioning, classroom talk, and scaffolding. These strategies have been named in research-based compilations of effective classroom practices, including the works of Robert Marzano, Carol Ann Tomelinson, and in large-scale studies of effective practices for teaching adolescents (Langer). Bryk and other Chicago researchers have found that when schools adopt a common instructional framework, they are able to achieve marked improvements in student learning (Newmann et al).

District Coherence. A central component of JFF’s work implementing early college designs at the district level is helping central office administrators align resources and activities around an “early college for all” approach. Multiple studies provide evidence of this approach’s impact on improving instruction: The Learning First Alliance has identified a coherent district-wide set of instructional strategies as a key factor in improving instruction (Togneri) and Harvard University researchers have found that a coherent strategy and a tight focus on implementing that strategy can improve student achievement (Childress et al).

3. IMPORTANCE AND MAGNITUDE OF EFFECT

States implementing high standards and assessments need proven models such as the ECHS design for districts and schools looking for a scalable approach that increases the number of high-need students who succeed in college-preparatory courses and are on-track for high school and college graduation. The design’s positive impact on student achievement is well supported by two rigorous research studies that surpass the moderate level of evidence threshold outlined in the i3 regulations and the What Works Clearinghouse (see Appendix D). Few secondary school
models have as promising a track record of success in improving student achievement, closing achievement gaps, increasing graduation rates, and launching underserved students on their college trajectories as does ECHS.

Given ECEP partners’ careful attention to faithful replication of the processes used to implement early college, we anticipate that the increased course progression rates and achievement gains demonstrated in the rigorous studies discussed in Appendix D will be matched in magnitude and scope. These expected outcome magnitudes are noted in Figure 1: a 10 percentage point increase in students taking and satisfactorily passing college preparatory courses; a 10 percentage point increase in graduation rates; and 90% of students graduating with some college credit.

In an experimental study, Edmunds et al. demonstrated the impact of early college on student progression in key college preparatory courses to be 8 percentage points (Edmunds et al., Rigor, Relevance, and Relationships). ECEP believes that students served will progress through college-preparatory courses at equal or higher rates, given maturation of the model. In a recent quasi-experimental study, SRI found that early college students in Texas are 2 times more likely to pass state exams in all four core subject areas than peers in comparison schools (125). The effect size for passing all four core subject tests was .42. The partnership expects students in ECEP schools to pass at similarly high rates.

An experimental study has also shown the ECHS design impacts persistence through high school. Examining the continued enrollment rates of early college and control students, Edmunds et al. (2011) found that early college students were 4 percentage points more likely to stay in school through the 10th grade and 7 percentage points more likely to stay in school through 11th grade than their control group peers. Edmunds et al. note that as the dropout rate diminishes as
students progress through high school, this effect on enrollment has the potential to lead to a an estimated 10 percentage point impact on graduation rates. Accordingly, ECEP expects a 10 percentage-point difference in graduation rates between early college students and other students.

Based on the results from the experimental study cited above, the implementation of this project should produce an effect size of .40 on continuing enrollment in the 10th grade, going up to .53 in the 11th grade, and eventually producing the effect size of at least .40 on graduation rate. The expected effect size on college preparatory course taking is .18.

C. QUALITY OF MANAGEMENT PLAN AND PERSONNEL

1. MANAGEMENT PLAN

Overview. The ECEP management plan and structure to scale ECHS designs in the Denver and LRG Valley regions draws upon JFF’s two decades of experience managing complex, multi-year education reform projects. JFF’s sophisticated project and financial management processes are designed to maximize results and minimize risk, and they now support a $30+ million annual budget and a significant portfolio of multi-year federal grants. Utilizing Microsoft Dynamics GP, these systems track tasks, deliverables, timelines, outcomes, and budgets at every level of project and stakeholder participation, and they are backed up by regularly scheduled project reviews to assess technical, budget and schedule progress and issues. JFF will manage all sub-grants to official partners and monitor the expenditure of all funds, including the required private match of federal grant dollars. Reflecting JFF’s exceptionally strong financial and project management capacity, JFF has had 13 consecutive years of clean independent audits conducted by federal and private sector auditors.

JFF’s Project Director and lead staff for this project have extensive expertise overseeing complex, multi-partner grant projects, and they will collaborate closely with Educate Texas and
PSJA, Brownsville, and Denver staff to ensure effective delivery of services, strong implementation, and high quality scaling of the design. Each partner has a clearly defined role and has designated an experienced project director and team directly responsible for the project. The ECEP workplan will be tracked using a collaborative online project management system that will be accessible to all partner teams and will ensure project oversight and delivery through integrated planning, management, and communication.

**Management Structure, Roles, and Process.** JFF Vice President Dr. Joel Vargas will serve as Project Director, and will manage JFF staff and partners to ensure the sound delivery of design, technical assistance and professional development services to accomplish ECEP goals and objectives. He will have ongoing access to JFF’s senior leadership, including President Marlene Seltzer. Dr. Vargas will manage JFF’s internal operations team who will provide financial and administrative services to ensure the successful execution of the management plan.

ECEP’s principal management vehicle will be the **multi-partner project leadership team.** Directed by Dr. Vargas, the leadership team will include JFF Associate Vice President Dr. LaVonne Sheffield, who will oversee JFF’s district and school design and professional development services to the districts in the two regions, and Dr. Chris Coxon, Chief Program Officer at Educate Texas, with responsibility for directing delivery of EdTX’s design, technical assistance and professional development services to Brownsville and PSJA. This project has the full support of the superintendents in all three ECEP districts, and each has designated a senior official to direct their district’s ECEP scaling efforts and serve on the ECEP project leadership team. These district officials (and ECEP leadership team members) are: Lydia Savedra, Assistant Superintendent for Curriculum and Instruction at PSJA ISD; Berta Pena, Assistant Superintendent at Brownsville ISD; and Bernard McCune, Executive Director of the Denver
Public Schools Office of College and Career Readiness. (See also Qualifications of Key Personnel below and Appendix F). The project leadership team will be convened monthly by Dr. Vargas to review activities and accomplishments, upcoming milestones, potential challenges, and project solutions, to ensure that project objectives will be achieved on time and within budget. The project leadership team will use Basecamp, a virtual management tool, to manage activities, support planning, monitor implementation, and share ideas on an ongoing basis.

At JFF, reporting to Dr. Sheffield will be: Dr. Caesar Mickens, who will direct JFF’s district and school-level design and technical support services; Dr. Sara Freedman, who will lead JFF’s delivery of instructional coaching and professional development services; Documentation Specialist Cecilia Le, who will document key strategies and lessons to inform program improvement, sustainability strategies, and future expansion; and an Instructional Trainer to be hired. Reporting also to Dr. Vargas will be: a Project Manager who will coordinate and monitor progress on all aspects of the management plan; and a Project Associate who will provide administrative support for the JFF team.

Reporting directly to Dr. Coxon at Educate Texas will be: Alma Garcia, who will oversee Educate Texas’ support for ECEP partnerships and district reform efforts in Brownsville and PSJA; Susan Henderson, who will oversee EdTX’s professional development and cadre of instructional coaches; and Dr. Denise Davis, who will provide data and research assistance to the districts. Supporting Assistant Superintendent Savedra in PSJA will be Nelda Cantu, the district’s Administrator for College Readiness, and supporting Assistant Superintendent Berta Pena in Brownsville will be Kathleen Jimenez, Administrator for Professional Development.

In Denver, Mr. McCune will lead a team of five regional network instructional superintendents (and network-based coaches) to implement the ECHS design and professional
development program at anchor schools within each network. Further supporting Denver’s efforts and reporting to Mr. McCune will be Charles Dukes, DPS Director of College Readiness and Postsecondary Access, who will oversee dual enrollment implementation and support.

**Figure 2**

Using this management structure to guide project implementation, the ECEP will achieve the following milestones according to the timeline indicated:

<table>
<thead>
<tr>
<th>Year 1 Milestones</th>
<th>Parties Involved*</th>
<th>Responsible**</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data agreements and MOUs signed</td>
<td>JFF, EdTX, LEAs, COL</td>
<td>JV</td>
<td>Q1-2</td>
</tr>
<tr>
<td>Implementation/outcome metrics set</td>
<td>JFF, EdTX, LEAs, COL</td>
<td>JV</td>
<td>Q1-2</td>
</tr>
<tr>
<td>Task Description</td>
<td>Responsibility</td>
<td>Location</td>
<td>Timeframe</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>----------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>School hiring plans set</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>LS, CC</td>
<td>Q1-2</td>
</tr>
<tr>
<td><strong>Instructional coaches identified/hired</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>LS, CC</td>
<td>Q2</td>
</tr>
<tr>
<td><strong>Course pathways/supports set up at schools</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>CC, CM</td>
<td>Q2-4</td>
</tr>
<tr>
<td><strong>EC PD for coaches launched</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>LS, CC, SF</td>
<td>Q2-4</td>
</tr>
<tr>
<td><strong>PD institutes for HS teachers launched</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>LS, CC, SF</td>
<td>Q2-4</td>
</tr>
<tr>
<td><strong>Documentation and dissemination plan set</strong></td>
<td>JFF</td>
<td>JV, CL</td>
<td>Q3</td>
</tr>
<tr>
<td><strong>State datasets built for evaluation</strong></td>
<td>SERVE</td>
<td>JE</td>
<td>Q2-4</td>
</tr>
</tbody>
</table>

**Year 2 Milestones**

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Responsibility</th>
<th>Location</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Community of practice extranet launched</strong></td>
<td>JFF</td>
<td>SF</td>
<td>Q1</td>
</tr>
<tr>
<td><strong>First (of 8) national biannual meetings held</strong></td>
<td>JFF</td>
<td>JV, LS</td>
<td>Q2</td>
</tr>
<tr>
<td><strong>District EC gap analyses completed</strong></td>
<td>JFF</td>
<td>JV, LS, CM</td>
<td>Q1-2</td>
</tr>
<tr>
<td><strong>Peer learning webinars&amp;regional mtgs begun</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>SF, CL</td>
<td>Q1-4</td>
</tr>
<tr>
<td><strong>On-site PD &amp; observational rounds begun</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>LS, CC</td>
<td>Q1-4</td>
</tr>
<tr>
<td><strong>PD institutes for MS teachers launched</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>LS, CC, SF</td>
<td>Q2-4</td>
</tr>
<tr>
<td><strong>PSJA EC demo site planning</strong></td>
<td>JFF, EdTX, PSJA</td>
<td>LS, CC, LydS</td>
<td>Q3-4</td>
</tr>
<tr>
<td><strong>Evaluation site visits &amp; surveys launched</strong></td>
<td>SERVE</td>
<td>JE</td>
<td>Q1-4</td>
</tr>
</tbody>
</table>

**Year 3 Milestones**

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Responsibility</th>
<th>Location</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Targeted on-site PD &amp; rounds</strong></td>
<td>JFF, EdTX, LEAs</td>
<td>CM, CC, SF</td>
<td>Q1-2</td>
</tr>
<tr>
<td><strong>PSJA EC demo site planning &amp; launch</strong></td>
<td>JFF, EdTX</td>
<td>LS, CC, LydS</td>
<td>Q1-3</td>
</tr>
<tr>
<td><strong>LEA-COL PD program planned &amp; launched</strong></td>
<td>JFF, EdTX, LEA, COL</td>
<td>LS, CC, CM</td>
<td>Q2-4</td>
</tr>
<tr>
<td><strong>EC coaching endorsement launched</strong></td>
<td>JFF, EdTX, LEA</td>
<td>LS, CC, BM</td>
<td>Q2-4</td>
</tr>
<tr>
<td><strong>First of yearly design brief series released</strong></td>
<td>JFF</td>
<td>CL</td>
<td>Q 3</td>
</tr>
<tr>
<td><strong>Evaluation surveys conducted</strong></td>
<td>SERVE</td>
<td>JE</td>
<td>Q1-4</td>
</tr>
</tbody>
</table>

**Year 4 Milestones**
Community of practice expanded  JFF LS, SF Q1
Districts improve data & prof. dev. systems JFF, EdTX, LEAs LS, CC, BM Q1-2
Districts achieve fully trained EC coach corp JFF, EdTX, LEAs LS, CC, BM Q1
College transition counseling w/all EC grads JFF, EdTX, LEA, COL CM, CC, BM Q2-4
District capacity to sustain EC achieved JFF, EdTX, LEAs JV,LS,CC,BM Q3
Evaluation site visits & surveys conducted SERVE JE Q1-Q4

Year 5 Milestones
Commun. of practice open to ed community JFF LS, SF Q2
Case studies/briefs/lessons disseminated JFF JV, CL Q2-4
Data analysis completed SERVE JE Q4

30,000 new early college students enrolled by end of year 5

2. QUALIFICATIONS OF PROJECT DIRECTOR AND KEY PERSONNEL

ECEP has created a management team that excels in leading complex regional, district, and high
school reform initiatives, providing strategic planning and implementation support to states,
districts, and schools implementing high standards, building coalitions of stakeholders, and
advocating for programs to prepare all high-need students for postsecondary success.

Dr. Joel Vargas, Vice President at JFF, will serve as Project Director. Dr. Vargas has played
a pivotal role in the development and expansion of the Early College High School Initiative since
its inception in 2002. As VP of JFF’s High School Through College division, Dr. Vargas
manages a staff of 18 focused on national early college expansion and accompanying
professional development and instructional coaching services, as well as directs the policy and
research agenda to improve the local, state, and national conditions for implementing early
college designs. A master coalition builder, Dr. Vargas has helped policymakers and school
development intermediaries develop strategies and state and federal policies over the past decade.
that expand early college designs for underrepresented students.

**Dr. LaVonne Sheffield**, Associate VP of Early College Expansion at JFF, will oversee JFF’s design, partnership, and professional development services to ECEP districts and schools. Dr. Sheffield’s comprehensive experience as a district superintendent (Rockford, IL and Recovery School District Region II, LA) and Chief Accountability Officer (Philadelphia) provide her with deep knowledge of successful strategies and potential barriers to achieving widespread district reform. **Dr. Caesar Mickens**, JFF Program Director, will direct JFF’s district and school-level design and technical support services. As a former deputy superintendent, principal, teacher, trainer, and educational software firm executive, Dr. Mickens brings both breadth and depth of knowledge of district implementation strategies, professional development, and instructional technology. **Dr. Sara Freedman**, who will lead JFF’s delivery of instructional coaching and professional development services, brings 30+ years of experience as an educator and school development coach, most recently at the Center for Collaborative Education in Boston. **Dr. Chris Coxon**, Chief Program Officer at Educate Texas, and ECEP project director for Texas, is a former Deputy Superintendent for Teaching and Learning in Boston Public Schools, and now manages Educate Texas’ school reform programs that serve 84,000 students at 108 college-ready campuses. **Lydia Savedra**, PSJA ISD Assistant Superintendent, who will direct PSJA’s efforts to scale early college designs, brings 30+ years as an educator in the district, including as Area Administrator, and is co-author of PSJA’s English language development and English transition programs. **Berta Pena**, Brownsville ISD Assistant Superintendent, has 20+ years experience as an administrator in the district, including as a high school principal. **Bernard McCune**, Executive Director of Denver’s Office of College and Career Readiness, brings extensive experience in directing postsecondary access and success strategies, most recently as Deputy
Director of the Department of College and Career Preparation at the Chicago Public Schools.

3. CAPACITY OF ECEP PARTNERS TO SCALE ECHS DESIGNS

ECEP will tap the proven capacity of JFF and its partners to establish and expand early college designs to not only reach a total of 30,000 students during the grant period but to build the platform for continued adoption. In the LRG Valley, JFF and its Texas school development partner EdTX will work deeply with 1) PSJA to extend early college to its remaining secondary schools and establish PSJA as an ECHS demonstration site as a platform for future expansion, and 2) Brownsville to scale the ECHS design to serve half the district’s secondary students. In Denver, JFF will work closely with DPS and provide extensive design and professional development support to scale early college to two schools in each of the district’s five regional networks, providing the foundation for further expansion within each regional network. To ECEP, JFF brings extensive design and technical assistance experience gained through support to hundreds of early colleges across the country over the last nine years. JFF’s non-profit partner in Texas, EdTX, has opened and supported almost 50 early colleges across the state in the last seven years. Each LEA partner, moreover, brings demonstrated capacity to implement college-ready reforms. Together, the ECEP partners’ track record strongly supports ECHS expansion in the Valley and provides a sound foundation of expertise on which to build in Denver.

Jobs for the Future. JFF’s 25-year history of implementing and scaling complex multi-site, multi-year projects include the Early College High School Initiative, which has successfully scaled the high-performing early college model to 270 schools serving more than 75,000 students in 28 states and Washington, DC; the Multiple Pathways Initiative, through which JFF has helped 15 cities, including Boston, New York and Philadelphia, create new school models to improve outcomes for over-age and under-credited students; and Achieving the Dream, through
which JFF supports 16 states to develop high-leverage policies to increase college success among low-income and minority students. Through JFF’s national policy and advocacy activities, our multiple peer learning networks, and other national partner networks, including GED to College and Accelerating Opportunity, JFF has demonstrated the capability to spread and scale the adoption of effective models and practices.

**Educate Texas.** Educate Texas has opened 108 new or redesigned schools serving 84,000 mostly underserved students in Texas. Through its Texas-Science, Technology, Engineering, and Mathematics (T-STEM) initiative, EdTX has opened 59 high schools to raise student achievement by implementing STEM-focused curricula and student supports. EdTX has opened 49 early colleges in Texas, and it oversees ECHS district expansion across the state, which has produced extremely successful outcomes for students in Hidalgo ISD, the first “early college for all” district in the nation and a primarily economically disadvantaged district with high percentages of at risk and LEP students. 95 percent of the class of 2010 in Hidalgo ISD successfully had completed an advanced or dual enrollment course upon graduation (Nodine).

**District Partners.** The PSJA, Brownsville, and Denver LEAs have a history of initiating and supporting early college schools and are well positioned to scale up the design. PSJA Superintendent Danny King was formerly a superintendent of Hidalgo ISD, whose roughly 3500, mostly Hispanic students graduate prepared for college at rates far surpassing peers statewide. Since coming to the much larger PSJA ISD in 2007, he has raised graduation and college enrollment rates and has set a goal to accelerate these outcomes by ensuring every student is in an early college school. Brownsville ISD implemented one of the original T-STEM schools and is a founding member of consortium a of Rio Grande Valley superintendents formed by EdTX to advance high school reforms, including early colleges. The district also has long, strong
partnerships with the University of Texas at Brownsville and Texas Southmost College. Denver Public Schools has made college-ready high school graduation a central goal: making sure that students are not just enrolled in college but prepared for success. To this end, they have supported an ECHS, have for years gradually raised the number of high school students district wide who take college courses (1,000 students last year), and view the expansion of early college designs as way to elevate the impact of this strategy in concert with the district’s ambitious instructional improvement agenda. Their strong partnerships with the Community Colleges of Denver and Aurora, among others, will help ensure the success of their scale up efforts.

**Policy Conditions Supporting Scale-Up and Sustainability.** Scale up of early college in the LRG Valley and Denver regions is made financially attainable, sustainable, and replicable due to favorable state policy conditions in Texas and Colorado. The costs of incorporating college courses into high school at a large scale is feasible when districts and colleges are both able, as they are in Texas and Colorado, to claim per-pupil enrollment funding (ADA and FTE) for high school students taking college courses. Also, when state policy permits college courses to be credited at the high school and college levels through dual credit, as in these two states, efficiencies in the early college design reduce traditional high school course offerings and redirect those savings to delivery of college courses and related student supports.

**D. QUALITY OF THE PROJECT EVALUATION**

The third-party evaluation of ECEP will be led by The SERVE Center at the University of North Carolina at Greensboro, who is currently conducting an IES-funded large scale longitudinal experimental study of the impact of the early college high school model. Through a high quality quasi-experimental study, the evaluation will assess the extent to which ECEP is having a positive impact on student outcomes associated with readiness for and success in college. The
evaluation will also collect detailed data on implementation to examine the level of implementation and to provide useful feedback to the program developers.

**Research Questions:** The research questions include both *impact* and *implementation* questions.

1. *(Impact)* To what extent does ECEP result in improved student outcomes, including increased college preparatory coursetaking and success, increased numbers of students staying in school, increased high school graduation rates, and increased college credits earned while in high school?

2. *(Implementation)* What services have been provided to schools? What has been the perceived quality and benefit of those services?

3. *(Implementation)* To what extent have participating schools and districts implemented the design elements of an Early College?

**Logic Model:** Figure 1 below (repeated from Section A) provides a logic model for the program and its anticipated outcomes. This model drives the project and evaluation design.

---

**FIGURE 1**

<table>
<thead>
<tr>
<th>ECEP Activities</th>
<th>School-Level Implementation of Design Elements</th>
<th>Intermediate Student Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical assistance to districts regarding:</td>
<td>College-Ready Academic Program:</td>
<td>Approximately 30,000 students participating in early college model</td>
</tr>
<tr>
<td>• Strategic planning</td>
<td>• A coherent instructional framework aligned to college-ready standards</td>
<td>10 percentage point increase in students taking and succeeding in college preparatory courses</td>
</tr>
<tr>
<td>• Implementation of Design Elements</td>
<td>• Engaging instructional practices</td>
<td>10 percentage point higher rate of graduation than comparison group students</td>
</tr>
<tr>
<td>• Development of college-school partnerships</td>
<td>• Rigorous untracked academic program</td>
<td>90% of students have received some college credit</td>
</tr>
<tr>
<td>• Design of aligned courses of study</td>
<td>• Strong post-secondary partnerships</td>
<td>Long-term Student Outcomes</td>
</tr>
<tr>
<td>• Design of support systems</td>
<td>• Aligned sequence of college courses and supports</td>
<td>Increased enrollment and success in postsecondary education</td>
</tr>
<tr>
<td>Professional development on Common Instructional Framework and Community of Practice including:</td>
<td>College Headstart:</td>
<td></td>
</tr>
<tr>
<td>• Professional development institute and instructional coaching platform</td>
<td>• Exposure to the culture and norms of college</td>
<td></td>
</tr>
<tr>
<td>• Regional and cross-regional peer learnings, webinars, site visits</td>
<td>• College courses, leading to 12+ credits</td>
<td></td>
</tr>
<tr>
<td>Organizational Practices:</td>
<td>Wraparound Student Supports:</td>
<td></td>
</tr>
<tr>
<td>• Structures that promote personalization/relationships</td>
<td>• Comprehensive academic supports</td>
<td></td>
</tr>
<tr>
<td>• College-going culture</td>
<td>• Strong social and emotional programming and support</td>
<td></td>
</tr>
<tr>
<td>• Ongoing job-embedded and integrated prof. dev.</td>
<td>• Explicit instruction on successful academic and social college behaviors</td>
<td></td>
</tr>
<tr>
<td>• Use of student data to inform decisions/eval. efforts</td>
<td>• Inclusive college application and financial aid advising and assistance</td>
<td></td>
</tr>
<tr>
<td>• Set time and support for teacher collaboration</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. WELL-DESIGNED QUASI-EXPERIMENTAL STUDY TO DETERMINE IMPACT

**Methodology:** The impact evaluation will utilize a comparative interrupted time series (ITS) approach in order to estimate the effects of the early college expansion initiative over and above the outcomes that would be observed in the absence of the initiative. This analytic approach combines two particularly strong quasi-experimental evaluation methods: an interrupted time series analysis and a comparison schools technique that will allow us to develop relatively reliable and unbiased estimates of the impact of the initiative on student outcomes.

**Sample:** The outcome analysis includes 5 high schools in Texas and 5 high schools in Colorado that will be receiving the treatment. Given the difference in the state context and the intervention approach, results for each state will be analyzed separately. Each treatment school will be matched to two comparison schools, resulting in a sample of 15 schools in Texas and 15 schools in Colorado. Where possible, the matching will be done within district. If not possible, then the matching will be done on both the district and state levels. Schools will be matched first on a three-year pre-intervention pattern of the outcomes of interest, including percent of students enrolled in Algebra II (which will serve as a proxy for students on a college preparatory path), percent receiving college credits while in high school, and dropout rates. Schools will then be matched on demographic characteristics, including percentage minority, percentage low-income and percentage English Language Learners.

The sample of 15 high schools in Texas will be sufficient to detect effect sizes of more than 0.23 standard deviations. Assumptions for the power analysis done in Optimal Design include a statistical significance level of .05, 80 percent power, 600 students per grade per school, an intra-class correlation of .10 (Hedges & Hedberg, 2007), and an estimate of $R^2=.80$ explained by $8^{th}$
grade achievement data used as a covariate. The sample of 15 high schools in Colorado with average sizes of 200 students per grade will be sufficient to detect effect sizes of more than 0.25 standard deviations, under the same assumptions. For outcomes in which we will be able to examine results for two cohorts of students (such as course-taking), we will be able to detect effects of 0.17 standard deviations in Colorado and 0.16 in Texas.

**Measures and Data Collection:** The study will examine the school-level and student-level intermediate outcomes identified in the logic model. Core outcomes include:

- **College preparatory coursetaking and success.** One of the main goals of the project is to increase the college readiness of students. A key part of this is enrolling students in the courses required for college entrance and helping them succeed in those courses. As a result, this study looks at the proportion of students taking and succeeding in a core set of college preparatory courses. These courses may differ slightly by state but will reflect the courses required by the state’s university entrance requirements.

- **Dropout and continued enrollment in school.** The intervention is designed to keep more students in school and on track for graduation. The evaluation will look at the number of students who drop out. Because we have found that the dropout data are not always complete, we will also look at the proportion of students who remain enrolled in school in each year. The intervention is expected to result in an increase of 5 percentage points per year in the proportion of students who remain enrolled in school, consistent with findings from the experimental study on early colleges.

- **College credits accrued while in high school.** One of the key goals of the program is to increase the number of students receiving college credit while in high school. We will examine the proportion of students receiving college credit through dual enrollment college
credit courses and AP courses.

- **High school graduation rates.** The intervention is designed to increase the number of students who are graduating from high school. The study will examine the impact of the model on the number of students graduating on time.

High school-level data will be provided by the individual states. Texas and Colorado both have longitudinal state-level data systems that can provide core outcome data as well as student demographic characteristics and baseline achievement data (from the year before entering the school receiving the intervention) that can be used as covariates in the analyses. We will obtain student-level data for the three years prior to implementation of the ECEP program and for Years 1-4 of the intervention.

**Analyses.** We will identify two comparison schools for each of the high schools in each state (as described in the sample section). Utilizing data from three years prior to the start of the intervention through each year of the intervention, we will then compare measures of student performance in schools that implemented the intervention to performance of similar students in the same schools prior to implementation of the intervention. The difference between performance levels in the two groups is referred to as a “deviation from the baseline.” We will then conduct a second interrupted time series analysis for the matched comparison schools in the same district that have student characteristics and baseline outcomes similar to those of the intervention schools. The difference between the deviations from the baseline in the intervention schools and the deviations from the baseline in the comparison schools will represent the estimated impact of the intervention.

We recognize that the schools participating in this intervention were not randomly chosen and, as such, may be differently motivated than schools that are not choosing to implement the
intervention and that will form our comparison group. This does provide a threat to internal validity (selection bias) that we are trying to mitigate by using the ITS approach, where the treatment schools also serve as their own controls. When supplemented by a comparison group, this approach can closely approximate an experimental design (Bloom & Riccio, 2005). Another potential threat to internal validity is history, or the fact that external factors, such as state-level policy change, may be influencing the schools and causing any changes we see. We are attempting to mitigate this threat by using a comparison group of schools in the same state or district (if possible) that would likely be exposed to the same external factors.

The fact that these schools are potentially more motivated to participate in the intervention also forms a threat to external validity as it will suggest that the results apply only to similarly motivated schools. During our site visits, we will collect data on the reasons schools are participating in the intervention and on the attitudes of schools toward the intervention. This may help us understand some of the characteristics that schools need to implement the intervention and will inform the extent to which we can generalize about the evaluation’s findings.

2. HIGH-QUALITY IMPLEMENTATION DATA AND PERFORMANCE FEEDBACK

The evaluation will also measure program implementation and analyze students’ experiences in the treatment and comparison schools. Aligned with the logic model, the evaluation will examine two aspects of implementation, 1) the nature and quality of the supports provided and 2) the extent to which the intervention is being implemented as intended in schools. Both of these aspects will be examined using a mixture of descriptive qualitative and quantitative data.

To determine the nature and quality of supports provided, the evaluation will collect participation records from program staff to determine the level of school staff participation in the different program activities (e.g., professional development, coaching, online collaboration).
The evaluation team will conduct two observations per year of the technical assistance and professional development provided by JFF and Educate Texas to the districts and schools. Once a year, staff in all participating schools will complete a survey that asks them to identify the activities in which they have participated and the quality and utility of those activities.

This annual survey will also be used to assess the extent to which the expansion schools are incorporating the Early College Design Elements. SERVE Center’s current experimental study of the impact of early colleges has developed a survey to measure implementation, which serve as the basis for the implementation survey for the i3 evaluation and will be adapted using indicators reflective of the key elements of the ECEP model. The survey will focus on:

- **College Ready Academic Program.** The survey will include scales that measure: 1) level of implementation of the common instructional framework, 2) use of rigorous and engaging instructional practices; 3) presence of a core curriculum that prepares students for college courses.

- **College Headstart.** Survey scales will measure: 1) activities designed to expose students to college norms and behaviors; 2) student enrollment in college courses.

- **Wraparound Student Supports.** Survey scales will measure 1) type and frequency of academic support; 2) type and frequency of social supports; 3) explicit instruction in college behaviors; 4) provision of college advising and financial aid assistance.

- **Organizational Practices.** The survey will include scales measuring the following school-level practices: 1) type and frequency of activities designed to build staff-student relationships; 2) quality of staff-student relationships; 3) college-going expectations; 4) professional development practices; 5) use of student data; and 6) frequency and nature of professional collaboration.
Staff at each comparison school will also be asked to complete a short survey focused on the design elements above. This will allow us to determine the extent to which the core components of the model are already being implemented in the comparison schools.

The evaluators will also visit three schools per state during each of the second and fourth years. Program staff will identify schools and/or districts that appear to be making the most progress toward implementing the Early College Design Elements. If appropriate, we will choose sites that appear to be emphasizing implementation of different Design Elements. For example, one site might have developed a comprehensive student support model while another might have dramatically increased its enrollment in college preparatory courses. During site visits, the research team will conduct interviews with district staff, school administrators, teachers, and students, and observe staff meetings, which will provide information on the implementation of the design elements, and factors that support or hinder implementation of the model. Following the same schools over a three-year period will allow for detailed information about implementation. Resources do not allow for collecting site visit data on the comparison sites.

**Reporting:** To ensure that program staff have the information that they need to revise and improve the initiative as necessary, the evaluation team will provide annual reports that include results from all relevant data. In the first two years, the reports will primarily focus on implementation measures while outcome measures will be emphasized in the final three years. In addition to the annual reports, the evaluation team will provide informal feedback during quarterly meetings with the program staff. We will document any programmatic changes that occur because of program feedback or because of other reasons.

3. **INFORMATION ON KEY ELEMENTS AND APPROACH TO FACILITATE FURTHER REPLICATION OR TESTING**
The evaluators will work with the project team to develop a clear picture of the key elements of the intervention, including indicators of implementation of the Design Elements. These indicators will then be incorporated into the survey and site visit protocols to accurately describe implementation of these elements in the school settings. Site visits will include questions that focus on understanding educators’ experiences with the processes and supports that are necessary for implementation of the model. One of the evaluation reports will include detailed information about how the Design Elements are implemented in various settings and what supports appear to be necessary to help school staff more effectively implement these Design Elements.

The evaluation team will also conduct exploratory analyses linking the level of implementation of the Design Elements to a school’s outcomes. The goal of these analyses will be to determine if there are specific Design Elements that appear to contribute to a school’s success. While we recognize that these analyses will be exploratory by their nature, our findings may help inform the focus of future scale-up efforts.

The evaluation will supplement the survey and site visit data with observations of the technical assistance and training provided by the project team and with interviews with the national program staff, state-level staff and the professional developers to ensure that the support needed to implement the intervention is adequately described. Finally, the evaluation will collect data from program staff on funding and other resources required for implementation of the model.

4. SUFFICIENT RESOURCES AND VERY QUALIFIED STAFF

The $1.54 million allocated for the evaluation will be sufficient to accomplish the tasks described in this plan. The evaluation will be led by Dr. Julie Edmunds at the SERVE Center at University of North Carolina - Greensboro. Dr. Edmunds is Principal Investigator for two IES grants for a longitudinal experimental study of the impact of the early college high school model.
in North Carolina. She has been studying early colleges for the past seven years and has an in-depth knowledge of both the design of the model as well as the issues associated with measuring its impact and implementation. Dr. Edmunds is also leading the evaluation of North Carolina New Schools Project’s I3 project—Validating Early College Strategies—that is seeking to implement the early college design in comprehensive high schools. She will be able to use insights from this evaluation to inform the evaluation of the ECEP project.

Dr. Laura Feagans Gould at SERVE Center will serve as Senior Quantitative Lead. Dr. Gould has spent the past 14 years conducting and applying research on at-risk youth to community and school-based programs that target social, emotional, and behavioral competencies of youth. She is a quantitative researcher by training with expertise in analytic frameworks relevant to longitudinal and nested data including, hierarchical linear modeling, growth curve modeling, structural equation and growth mixture modeling.

SERVE will also sub-contract with firms to assist in the analysis of administrative data in Texas and Colorado. We will seek out small businesses with expertise in using the data in the two states.
BIBLIOGRAPHY


