

# THE RURAL EARLY COLLEGE NETWORK (RECN)

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## The RURAL EARLY COLLEGE NETWORK

**Introduction: Response to Priorities.** The Center of Excellence in Leadership of Learning (CELL) at the University of Indianapolis, a 501(c)(3), is applying for this Education Innovation and Research (EIR) Mid-Phase Grant to support its Rural Early College Network (RECN) project. Rigorous evaluation has shown Early College (EC) increases success for high-need students in postsecondary and career readiness. Using a network of mentor and mentee rural high schools (HSs), RECN will accelerate EC implementation by providing training, technical assistance, and coaching. RECN also will improve student achievement and increase postsecondary options. By project's end, RECN will expand EC to 20 schools, impacting 3,725 high-need, rural students.

RECN will address **Absolute Priority 1- Moderate Evidence** by replicating the positive student outcomes found in the American Institutes of Research (AIR) and SRI International (SRI) *Early College: Early Success* study (2013) and the studies included in the What Works Clearinghouse Intervention Report on Dual Enrollment Programs (WWC, 2017). Both the study and intervention report are identified on the Evidence Form along with descriptions of how the positive student outcomes and practices implemented correspond with the RECN project's intended outcomes and practices. The RECN project replicates the student population and settings in the two sources, and we strongly believe the project will generate similarly positive student outcomes.

RECN also addresses **Absolute Priority 2 – Field-Initiated Innovations—General** by building on previous EC studies to achieve the end goal of developing and implementing multiple models (traditional, career-technical [CTE], polytechnic) of EC across the state to meet students' varied postsecondary needs. Because EC emphasizes the value of a postsecondary education, it prepares underserved students for 2- or 4-year college or technical training and supports students in accessing and continuing on in postsecondary education.

This project also is unique in that it focuses on improving outcomes for students in *rural* HSs. Rural communities were disproportionately affected by the 2008 recession, and their students often do not envision attaining career or academic achievement beyond HS. With the goal of implementing EC in HSs more quickly, RECN will leverage the model's impact on both educational attainment rates and economic development. Through RECN, CELL will provide training and mentoring to participating HSs to strengthen curriculum and instruction while embedding education-workforce best practices. RECN professional development (PD) will ensure network HSs adhere to best practices for delivering curricular rigor while supporting students exploring post-secondary options.

**A. Significance: 1) Increase Knowledge of Effective Strategies:** EC compresses the time it takes to complete a HS diploma and postsecondary credential while targeting low-income, first-generation, and other high-risk students. The EC model is based on the principle that academic rigor and the opportunity to save time and money are powerful motivators for students to work hard and meet serious academic challenges. Research shows EC is effective at improving students' non-cognitive abilities, enhancing engagement, and mitigating effects of poverty. Multiple studies conclude that EC students are more likely to graduate HS, enroll in college, and earn a degree, regardless of gender, race/ethnicity, family income, prior achievement, and first-generation college-going status (AIR & SRI, 2013; Edmunds, 2010).

This project has national significance as it addresses rural communities' issues – distance from rebounding industries, high poverty, and low postsecondary attainment – as the economy to continues recover. With almost half of US school districts in rural areas (U.S. Dept. of Education, 2016), this project could be a game-changer for high-need students and rural communities.

RECN will develop rural ECs that address local workforce demands and can be validated and scaled across the state and nation.

Originally ECs were small schools on postsecondary campuses inspiring students to matriculate to a university. Results of a lottery-based randomized trial of ECs located on college campuses show that EC is a powerful tool to improve outcomes for under-represented students proving EC students are more likely to graduate from HS, enroll in college, and earn degrees than comparison students. Results were consistent across student subgroups (AIR & SRI, 2013).

One challenge to EC expansion has been locating these HSs on postsecondary campuses, which are inaccessible for rural IN students. CELL responded to this challenge by embedding EC within HSs. Since receiving a 2003 Gates Foundation grant to establish ECs in IN, CELL has been the state's lead cultivator, trainer, and supporter of HSs implementing the EC model. In 2013 the Indiana Commission for Higher Education (ICHE) named CELL the sole state endorser of official, high-quality ECs (Appendix H). Expanding EC across IN has benefited a variety of schools and students; rural schools are a large proportion of schools seeking to offer EC.

To ensure fidelity, CELL developed an EC model based on eight Core Principles, more than the five principles typically employed by other states (AIR & SRI, 2013). CELL's principles (Appendix H) build on existing strategies to provide concrete guidance for HSs implementing EC. To ensure rigor, a CELL Principle is strong partnerships between post-secondary and HS staff. The alternative delivery of the EC model in HSs instead of college campuses and CELL's expanded principles are promising practices CELL will share with other states/regions. In addition, CELL's Principles are continually reviewed for relevance; through this RECN, we intend to further emphasize and embed college *and career* readiness in the Core Principles. Thus, an updated version of CELL's Principles will be a product of RECN.

Similar to the AIR & SRI (2013) study results, outcomes from an ICHE-CELL comparison study (2017) of 600 students from nine endorsed IN ECHSs show strong results for underrepresented students: 81% of IN 2014 EC graduates enrolled in a 2- or 4-year college or technical program, compared to only 65% of all IN HS graduates. The ICHE just released *Early College Credit (Dual credit, AP & the broader landscape of earning college credits in high school)*, January 2019. The Commission’s findings indicate that IN EC graduates performed better than non-EC graduates in terms of college going, college persistence, and degree completion. The EC data were reported by schools that CELL trained and then endorsed. The table below summarizes EC findings in ICHE’s report below.

**Early College Credit, ICHE, January 2019, College Grads**

	EC grads enrolling in IN public colleges within 1 yr. of HS graduation	Non-EC grads enrolling in IN public colleges within 1 yr. of HS graduation
College Going	78%	65%
Persistence	70%	66%
Completing Degree Within 4 Yrs.	43%	35%

In addition, the Commission notes a significant correlation between college access and success for low-income and minority students. The table below shows higher percentages for EC students compared to non-EC students in both the At-Risk and Non-At-Risk categories.

**Early College Credit, ICHE, January 2019, At-Risk Students**

	EC *At-Risk Student	Non-EC At-Risk Student	EC Not At-Risk Student	Non-EC Not At-Risk Student
College Going	76%	54%	82%	71%
Persistence	67%	55%	76%	72%
Completing Degree Within 5 Yrs.	36%	21%	68%	42%

*\*At-Risk is defined as minority students and/or students participating in Free or Reduced Lunch*

CELL’s endorsed EC programs track each graduating cohort’s various data. The next table highlights student credit earnings and financial savings for 2016-17 and 2017-18 below.

**CELL Endorsed Schools Data – Credits Earned & Financial Savings**

	2016-17 (n=17)*	2017-18 (n=21)	Biennium Total

Total EC Grads from Endorsed Schools*	5,913	7,069	12,982
Total Dual Credit Hrs. Earned	44,039	53,708	97,747
Total Tuition Savings Reported**	[REDACTED]		

\*n=number of schools. \*\*Data reported in E

\*\*\*Savings included free tuition classes & classes figured at the Ivy Tech credit hour rate. Many student attend public and private state universities with higher rates so this reported amount is on the conservative side.

This data is especially compelling since EC students are from traditionally underserved populations, typically less likely to succeed in postsecondary.

Another EC challenge is reliance on traditional pathways to 4-year degrees; RECN encourages multiple pathways to postsecondary success with a clear emphasis on college *and* career readiness. CELL offers three iterations of the EC model – traditional leading to 2- or 4-year college, CTE EC leading to a certification or 2-year college, or polytechnic that deeply involves an industry sector resulting in a technical certification, associate degree, and/or employment. Half of all jobs requiring postsecondary education in IN by 2025 will require an associate degree or high-quality technical certificate (GCEW, 2014). In 2015, 45% of businesses left jobs unfilled due to shortages of qualified workers (IN Chamber of Commerce, 2016). In response to this skills gap, CELL’s Education Workforce Innovation Network (EWIN) was created in 2013 in partnership with IN Department of Workforce Development (DWD) and Lilly Endowment. Through EWIN, the EC initiative expanded to include polytechnic, which partners HS, postsecondary, and business. Business partners engage beyond typical work-based learning (WBL) by mentoring/partnering to strengthen professional skills needed in today’s economy.

CELL’s RECN implementation, an exceptional, distinct approach, addresses Absolute Priority 2 by expanding EC to rural HSs. Distinctive aspects of RECN for rural locales include infusing rigorous College and Career Readiness (CCR) into EC implementation to accelerate

postsecondary success for high-need students, demonstrating flexibility of EC (e.g., various pathways, organization of students). RECN's unique features include a) creating a triad of partners in K-12, postsecondary, and businesses to develop a continuum of WBL activities and Work Ethics Certificate (WEC) programs; b) embedding professional skills through intentional WBL curriculum; and c) leveraging EC as a statewide rural economic development strategy.

RECN's mentoring and networking approach, with successful ECHSs mentoring new ECHSs, is an exceptional practice. RECN will develop a cohort of high-performing rural ECHSs focused on increasing the number of high-need students graduating from HS ready for both postsecondary and careers. Through RECN, these practices will be shared statewide, allowing faster scaling of successful strategies in multiple communities.

**A.2. Unmet Demand for Effective Strategies:** The US economy has experienced two seismic shifts: the 2008 Great Recession and transitions from industrial to technological foci. Both shifts are transforming the workplace, resulting in changing workforce skillsets. As the economy rebounds, new jobs are dissimilar to jobs that disappeared – namely production, construction, and clerical positions (Georgetown Center of Education and the Workforce [GCEW], 2016). Post-recession jobs are primarily professional and managerial and require some postsecondary education (Jobs for the Future, 2017). Industries generating the most jobs include technology, healthcare, finance, education, and government (GCEW, 2015). Recovery in hardest hit sectors does not mean re-hiring production workers; instead, workers with some post-secondary education are perceived to add value to the entire production chain (GCEW, 2016).

This dichotomy highlights the sluggish post-recession recovery – workers suffering most during the downturn are less likely to benefit from the recovery. By 2020, 65% of all jobs will require postsecondary education; yet, only 39.6% of citizens 25 or older hold a postsecondary

degree (GCEW, 2014; U.S. Census Bureau, 2016). Thus, it is critical to address educational attainment that is linked closely to individual success and national economic health.

Current demand for workers with postsecondary credentials increases urgency for HSs to produce postsecondary-going graduates with skills and motivation to succeed. EC HSs are a viable method to support and accelerate students through credentialing that lead to high-wage, high-demand careers and/or additional education. ECs blend HS and college in rigorous yet supportive programs enabling students to complete HS and earn substantial college credit.

The recession disproportionately affected rural communities with job and industry loss and high levels of unemployment persisting beyond recovery. As industry moved or transitioned technologically, rural areas declined as people followed employment opportunities. A lack of amenities (i.e., access to hospitals and clinics, restaurants, shopping centers) compounded these factors, making rural areas susceptible to high poverty and decreased opportunities (USDA, 2016). Rural schools struggle with unstable student populations and difficulty recruiting teachers and staff, greatly reducing students' academic and co-curricular opportunities. Rural students often share attributes of underserved populations with high poverty and first-generation college-going status. CELL will provide substantial resources, coaching, and professional development (PD) opportunities to RECN HSs to ensure postsecondary success for rural students.

RECN will validate and scale EC in rural Indiana (IN) schools to address unmet education-workforce needs in hard-hit areas. CELL leads a small network of three rural HSs implementing EC. It formed as part of an i3 grant to North Carolina New Schools with IN as a partner and CELL as its facilitator. Meeting quarterly, the group exchanges ideas and discusses problems of practice to help facilitate EC implementation. In one year, schools made two years of progress by quickly implementing EC to meet student and community needs; network schools made pro-



gressed on the EC rubric by moving from 1's and 2's in the baseline assessment to 3's and 4's on at least four Core Principles. CELL believes a rural school network can accelerate EC implementation and endorsement. RECN will target identified districts and provide ongoing PD, coaching, and mentoring increasing the number of rural HSs implementing EC models.

Most rural IN HSs are in desperate need of assistance to update curriculum, retain teachers, and prepare students for postsecondary education and careers. Of the 399 public school districts (including charter schools) in IN, 254 (63.7%) are identified as rural by the US Dept. of Education (2018). These small schools have suffered funding cuts while simultaneously being asked to do more with less. RECN offers funding, support, and future planning to 20 rural high schools; however, 100+ rural HSs in the state would also benefit from a RECN approach.

**B. Project Design:** RECN will assist small, rural IN HSs in efficiently implementing the EC model with fidelity. Five mentor schools will be paired with a mentee or Tier 1 HS in Year 1. With CELL's guidance, these ten HSs will form the initial Rural EC Network and solve implementation issues. In Year 2, five more HSs (Tier 2) will be added, so mentor schools then work with two HSs each, for a network of 15. In Year 3, five more schools (Tier 3) will be added, bringing the network to 20. Tier 3 schools will be selected during Year 2 so they may begin preparing teachers for DC credentialing. For a list of participating schools, see Appendix F with school's requisite locale codes or the Abstract.

To guide the schools' work, CELL staff and one administrator from each school will form the Project Leadership Team (PLT). The project's director of evaluation will serve on the PLT as needed. The PLT will convene several times a year and each summer to set annual goals, plan project activities, and review data for project monitoring.

**B.1. Goals, Objectives, and Outcomes:** RECN focuses on three goals: 1) increase students' college readiness and postsecondary acceptance, 2) increase students' career readiness and opportunities, and 3) increase efficiencies to build capacity for RECN schools. The Management Plan on pages 27-30 details goals, objectives, activities, start/end dates, measures, and outcomes.

A variety of strategies will be used to meet *Goal 1: Increase students' college readiness and postsecondary enrollment*. EC students will choose pathways (e.g., general education core, business, health care, etc.) and enroll in appropriate DC courses. Wraparound supports, intentional advising, and staff monitoring will help students handle rigorous expectations. Teachers also will receive PD and coaching to infuse rigor, college and career readiness (CCR), and professional skills into curriculum. School leaders and counselors also receive mentoring and targeted PD. RECN schools will create a 4-year sequence of postsecondary visits so students experience a variety of options – private or public, liberal arts or a technical institute, small or large campuses. Visits and targeted supports in DC courses help students envision futures that include a postsecondary education. Students will be assisted with completing postsecondary enrollment and financial applications, and acceptance letters will be celebrated.

RECN embeds a robust array of strategies to meet *Goal 2: Increase career readiness and preparation*. Students need early exposure to many career options available. Local businesses and industry tours, career fairs, or “Manufacturing Days” are part of this intentional exposure. RECN HSs will establish Education-Workforce Partnerships for improved communication about local workforce needs. Partnerships will develop a K-12 continuum of WBL activities. For instance, 8th graders may participate in career fairs, freshmen take part in a manufacturing or IT day, while sophomores complete a job shadowing experience. Juniors and seniors may have internships at several work sites. WBL activities broaden students' knowledge of different careers

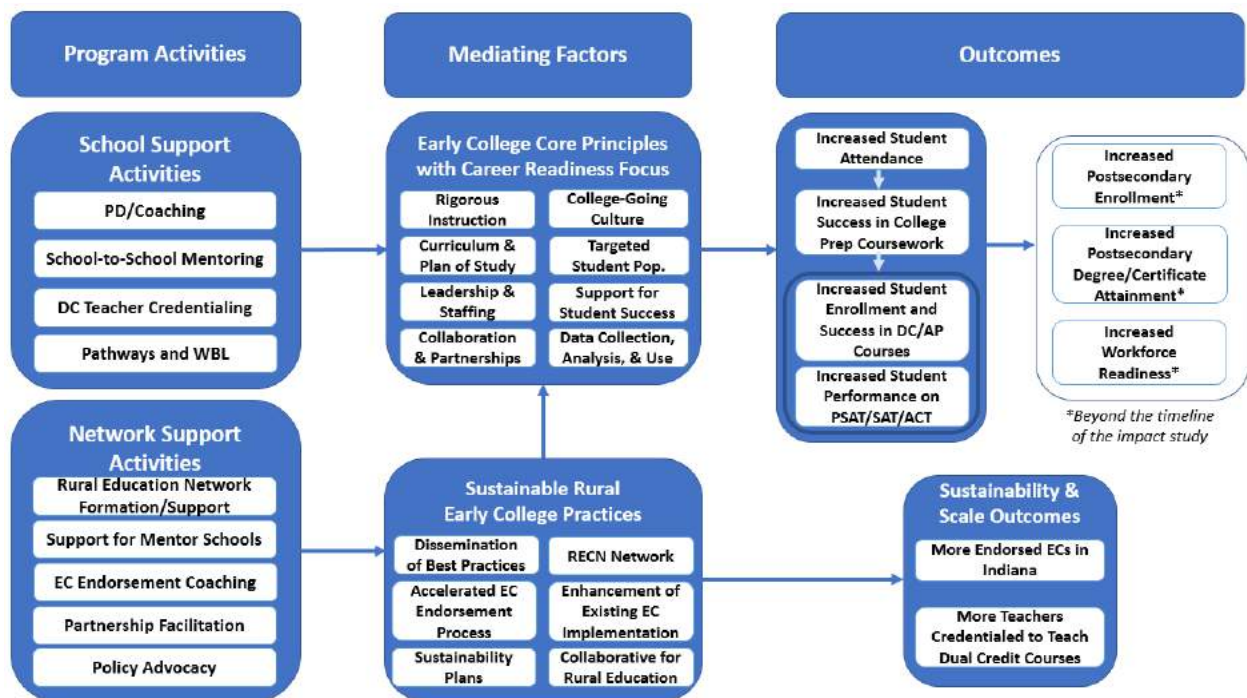
and instill vital professional skills. Business tours for parents and teachers and summer externships for teachers and counselors will raise awareness of local work opportunities and various industries' changes. These career readiness activities and supports in advisory programs assist students with professional skills development to strengthen schools' career readiness in the EC model. In turn, the EC rubric will be revised to reflect career readiness expansion in the categories of Collaboration and Partnerships, Supports for Student Success, and Data.

Last year, IN's DWD began offering small grants to encourage schools to create Work Ethics Certificates (WECs). Districts partner with local businesses to determine their WEC requirements, and CELL's EWIN team has worked extensively with several communities to establish WECs. Rural schools often have limited curricular offerings, hampering graduates' competition for postsecondary or work opportunities. Since a WEC is already valued in our state, this certificate program would benefit RECN schools, their graduates, and local employers.

Last year, Indiana adopted new HS Graduation Pathways with increased attention to CCR as well as the ongoing emphasis on dual credit. The EC model is a perfect way to meet rural schools' needs to implement all aspects of the Graduation Pathways.

To meet *Goal 3: Increase efficiencies and build capacity*, CELL will organize the 5 mentor schools into a functioning network within weeks of the project's start. Each HS will provide baseline data on many indicators (see Project Evaluation) including CELL's 8 Core Principles. CELL will help RECN schools target high-need students and "middle of the pack" students who have not considered a postsecondary education in their futures. Ideas for marketing, parent engagement, and communication will be generated in network meetings. RECN HSs will meet with CELL quarterly, and mentor schools will communicate and/or meet with their mentees between network meetings. Sharing problems of practice will be part of each network agenda with a focus on collaborative problem solving.

**B. 2. Conceptual Framework:** The logic model below embodies the RECN conceptual framework. This model will guide project implementation and evaluation. A larger version is in the appendices. The graphic simultaneously captures school-level activities and impacts of the EC model through contents in the upper row and sustainability and scale activities through the network in the lower row. Implementation activities are split into two categories – school support and network support.



The evaluation will examine implementation of activities and assess changes in the mediating factors – the treatment EC programs using CELL’s EC Core Principles and the development of sustainable EC and career readiness practices throughout the RECN network. For the first goal, evaluation will assess 9<sup>th</sup> and 10<sup>th</sup> grade student impacts on attendance, success in college preparatory coursework, enrollment and success in DC courses (including AP), and student performance on the PSAT. Numbers, types, and quality of career readiness activities for students will be documented for the second goal. Area business/industry engagement in each RECN

school's community with WBL and WEC and staff participation in learning about area work-force needs will also be documented. The evaluation will also assess the extent to which the project is attaining the third goal for increasing efficiencies and building capacity, including the number of endorsed EC programs in IN and the number of teachers credentialed for dual credit.

More details about how the project evaluation will be structured and conducted are presented in section E. Project Evaluation.

**C. Strategy to Scale 1. Address Barriers Preventing Scaling of Strategy:** Two barriers have prevented scaling of EC in IN, especially in rural HSs. The first is an inadequate supply of teachers credentialed to teach DC courses. HS teachers credentialed for DC instruction are essential to ECHS programs. In 2014, the Higher Learning Commission (HLC) increased requirements for adjunct faculty and HS staff who teach DC courses. Since IN is an HLC state with over 2,500 teachers providing DC instruction, this change has daunting implications for IN's robust DC offerings. HLC granted IN a 5-year extension so teachers have until 2022 to earn master's degrees in content areas or 18 credit hours in content areas in addition to a master's in education. In the last decade, IN removed financial incentives from district salary schedules so few teachers now earn master's degrees. Financial incentives are needed to encourage teachers to earn the necessary graduate credits to teach DC courses. To ensure that EC in RECN schools will be sustainable, the project includes funding for tuition support and/or salary schedule incentives.

The second barrier to EC implementation in rural schools is funding. Throughout 10+ years of working with IN schools to implement EC, CELL has not been able to specify funding needed to implement and sustain EC programs. Schools approaching CELL about implementing EC have varying degrees of program components in place, such as student supports, tuition and textbook funding, and numbers of credentialed teachers. Thus, CELL has not been able to defini-

tively quantify funding needed to create, implement, and sustain ECs. Most schools CELL has worked with adjust their budgets and/or commit to raising funds to implement EC.

In 2007, CELL received a National Governors' Assoc. grant to award \$ [REDACTED] each to 10 HSs over 3 years to implement EC. Nine of the 10 HSs funded have endorsed ECs still running successfully (the 10<sup>th</sup> school was a charter school closed due to lack of funding). While \$ [REDACTED] seemed adequate to launch, implement, and sustain these EC schools, those grants were awarded prior to DC teacher credentialing changes, further burdening school budgets.

Thus, CELL will study how RECN schools spend their allotted funding and determine the amount of funding essential to launch and sustain ECHSs. This information will be vital for communities interested in the EC model as well as for the legislature, IN Department of Education (IDOE), ICHE, and other potential funding sources.

**C.2. Increase Efficiency in Use of Resources:** In the last decade, CELL has trained over 100 HSs and CTE centers on CELL's EC Core Principles. Schools range from tiny to large in enrollment and are located in urban, rural, and suburban communities. These HSs use various configurations to implement EC, including cohorts, school-within-school models, and whole school design. EC is a flexible model easily replicated in any setting and with varied student populations. (Note: The EC model targets student populations such as first-generation college-goers, free/reduced lunch students, English language learners, students of color, and B-C students who have not considered themselves college material. Although honors students may want to participate in EC, such students often have the necessary supports in place to succeed in school – unlike targeted populations.) CELL would like to replicate the RECN model with more rural HSs plus urban schools to help improve student outcomes, and we envision other states would use CELL's network format and practices to scale this accelerated EC implementation.

One project purpose is to accelerate the time it takes HSs to achieve CELL's EC endorsement that recognizes high-quality ECHSs. While CELL has trained over 100 schools in the EC model, only 25 schools have achieved endorsement. To earn endorsement, a HS submits an extensive portfolio and hosts a CELL visit. HSs achieving 4s and 5s on all 8 Core Principles and graduating EC students (EC Rubric in Appendix H) earn endorsement. Generally, schools achieve endorsement in 3-5 years. But with CELL's continual technical assistance, coaching, and emphasis on networking peer schools, we anticipate RECN schools' progress toward endorsement will be accelerated to 2-3 years. Two unique practices – CELL's EC endorsement process and the RECN framework for EC acceleration – are features we are confident other states would emulate to ensure expedited, quality EC implementation.

This project also includes creation of a collaborative for rural education (CRE). In the US, 17 such collaboratives exist (Battelle for Kids, 2016), serving a variety of purposes including cooperative purchasing, teacher recruitment and retention strategies, collaborative use of distance learning to offer curriculum that cannot be afforded by individual schools, PD for subject- or grade level-specific teacher cohorts. Although IN ranks 9<sup>th</sup> in the US for size of rural student population, our state does not have a CRE despite being surrounded by states that do. CELL has begun work with a variety of stakeholders – rural school leaders, government agencies, rural health organizations, legislators – to explore establishing a CRE. Funds built in the RECN budget will facilitate and accelerate establishment of a CRE. RECN schools would be natural inaugural members, and project lessons learned would benefit IN's other rural schools.

The RECN project is designed with an eye both to sustainability and scaling. Participating schools will have well-established EC programs with credentialed DC teachers in place by the project's end. RECN meetings will continue voluntarily as our past experience has shown

that established relationships, trust, and mutual learning are valued by network HSs. The activities essential for successful, accelerated implementation and meticulous expenditure records will be documented in sustainability plans. The PLT meetings will focus on sustainable practices from Year 2 to project’s end. Consulting with its mentor school, each mentee HS will prepare and present a sustainability plan to other RECN schools for feedback and suggestions.

CELL also will present a scaling plan to the network for input and then revise it for use in presentations to state agencies, funders, and legislators. Several options for scaling – from small to large numbers of schools involved and to other types of schools such as urban and suburban – will be presented in detail. Most importantly, track records and achievements of RECN schools will be the most effective marketing tool CELL employs in its scaling efforts. IN and other states will benefit from rural HS models demonstrating effective, robust EC implementation along with protocols for accomplishing accelerated implementation with fidelity.

**D. Adequacy of Resources and Management Plan: 1. Achieving Project Tasks:** The Management Plan presented on pages 27-30 lists the RECN project’s goals, objectives, and outcomes. The Budget Narrative provides additional detail about the cost of project activities and how they will be accomplished.

**D.2. Applicant’s Capacity:** A successful project depends on talented professionals for optimal implementation. *Table A: Key Personnel* below lists the specific people involved in RECN along with their responsibilities and percentage of their time.

<b>TABLE A: KEY PERSONNEL</b>		
<b>POSITION</b>	<b>FUNCTION</b>	<b>FTE %</b>
<b><i>PROJECT LEADERSHIP TEAM (PLT)</i></b>		
Janet Boyle, Ph.D., Executive Director, CELL <i>Project Director</i>	• Serves as project director with overall responsibility for implementation • Supervises CELL staff dedicated to RECN project • Leads PLT • Serves as lead contact for U.S. Dept. of Education	55%



Sandy Hillman, Director of Early College, CELL	<ul style="list-style-type: none"> <li>• Ensures sound delivery of services &amp; technical assistance to schools &amp; committees</li> <li>• Oversees submission of required reports</li> <li>• Leads school grants process, oversees endorsement process, ensures fidelity of EC implementation</li> <li>• Serves as CELL primary liaison with evaluation team</li> <li>• Acts as liaison with policy makers</li> </ul>	100%
Erin Foster, Director of Education- Workforce Innovation (EWIN) Network, CELL	<ul style="list-style-type: none"> <li>• Leads school training on pathways development &amp; WBL continuum</li> <li>• Facilitates meetings among school leaders, business, &amp; higher education (HE) partners</li> <li>• Supports schools in developing engaging WEC programs</li> </ul>	50%
Coordinator of Early College, CELL <i>2 positions; one hired in Year 1 and other hired in Year 2</i>	<ul style="list-style-type: none"> <li>• Assists with school grant &amp; endorsement processes</li> <li>• Serves as primary lead on required reports</li> <li>• Assists EC director with monitoring timelines &amp; project activities</li> <li>• Handles logistics &amp; planning for training &amp; project events</li> </ul>	100%
Pam Warner, Assistant Director of EWIN, CELL	<ul style="list-style-type: none"> <li>• Assists EWIN Director with on-site training and meeting facilitation</li> <li>• Serves as liaison to each school for WBL, WEC, and pathway development</li> <li>• Handles meeting logistics</li> </ul>	50%
Coordinator of Collaborative for Rural Education, CELL <i>To be hired in Year 1</i>	<ul style="list-style-type: none"> <li>• Works closely with Project Director to organize collaborative</li> <li>• Handles all meeting logistics, evaluation, communication</li> <li>• Researches other states' collaboratives and uses design elements for IN's CRE</li> <li>• Leads all collaborative meetings &amp; events</li> </ul>	100%
<b>PROJECT SUPPORT TEAM</b>		
Kyleigh Gerlach, Director of Operations, CELL	<ul style="list-style-type: none"> <li>• Oversees financial operation of grant</li> <li>• Supervises administrative assistant's work with the project budget</li> <li>• Adjusts budget as needed</li> <li>• Prepares financial reports</li> <li>• Serves as liaison with university financial &amp; HR depts.</li> <li>• Advises on event planning</li> </ul>	50%
Marianna Richards, Director of Communications, CELL	<ul style="list-style-type: none"> <li>• Creates &amp; directs project communications</li> <li>• Develops &amp; refines marketing plan</li> <li>• Edits &amp; formats reports</li> <li>• Manages digital presence</li> </ul>	30%
Administrative Assistant, CELL <i>To be hired in Year 1</i>	<ul style="list-style-type: none"> <li>• Works closely with school districts &amp; project partners to ensure efficient billing procedures &amp; systems</li> <li>• Provides support for event planning &amp; clerical tasks</li> <li>• Assists PLT members as needed</li> </ul>	40%
<b>PROJECT EVALUATION TEAM</b>		
Eric M. Grebing, Ph.D., Re- search & Evaluation Special- ist, SERVE Center, <i>Lead for RECN Evaluation</i>	<ul style="list-style-type: none"> <li>• Designs &amp; implements all aspects of project evaluation</li> <li>• Analyzes project data &amp; edits required reports</li> <li>• Monitors evaluation activities to ensure project data collection &amp; analysis activities are achieved</li> <li>• Member of PLT</li> </ul>	Not applicable: project-based contract
Bryan C. Hutchins, Ph.D., Re-	<ul style="list-style-type: none"> <li>• Leads quantitative data management and analysis</li> </ul>	

search Specialist, SERVE Center	<ul style="list-style-type: none"> <li>• Implements data collection, analysis, &amp; reporting</li> <li>• Assists with report writing/editing</li> </ul>	
Julie A. Edmunds, Ph.D., Program Director for Secondary School Reform, SERVE Center	<ul style="list-style-type: none"> <li>• Serves as senior adviser on the project</li> <li>• Reviews evaluation design and instruments</li> <li>• Provides insight as needed from extensive PI experience</li> </ul>	

*Timeframe and Milestones:* Timelines are essential for accomplishing project goals and objectives in an organized, expedient manner. Key project activities with milestones are listed quarterly and yearly in *Table B* below and on the following page.

<b>TABLE B: MILESTONES AND TIMEFRAME</b>							
<b>Activity</b>	<b>Milestones</b>	<b>Responsibility</b>	<b>Y1</b>	<b>Y2</b>	<b>Y3</b>	<b>Y4</b>	<b>Y5</b>
Prepare for project implementation	Secure agreements, hire positions, meet with evaluators, set up project leadership, inform stakeholders of goals, gather baseline data to inform decisions, organize tasks, organize mentor schools, & schedule meetings	Project leadership team (PLT), CELL team	Qtr 1-3				
Provide robust PD & support for EC implementation	1) Offer school- and role-specific PD to staff; 2) Offer network-wide PD on 8 Core Principles, WBL; 3) Establish incentives to credential teachers for DC; 4) Foster HS & university teacher collaboration on DC curriculum	PLT, EC staff, school leadership teams	Qtr 3-4	Qtr 1-4	Qtr 1-4	Qtr 1-4	Qtr 1-3
Implement EC model with fidelity	1) Provide PD & support on 8 Core Principles, 2) Develop and implement gr. 9-12 advisory program, 3) Create student support continuum, 4) Organize gr. 8-12 college visits, 5) Schools achieve EC endorsement	PLT, school leadership teams, EC teacher leaders & counselors	Qtr 2-4	Qtr 1-4	Qtr 1-4	Qtr 1-4	Qtr 1-3
Partner with businesses to embed WBL, WEC program development	Form business-education partnerships to 1) Organize industry tours for stakeholders, 2) Involve more businesses/industries in offering WBL experiences, 3) Increase student WBL involvement, 4) Encourage development of WEC program	PLT, school principals, EC teacher leaders		Qtr 1-4	Qtr 1-4	Qtr 1-4	Qtr 1-3

Engage students	1) Enroll students in EC program/ DC courses, monitor progress, 2) Take students on college visits/ industry tours, 3) Provide academic, social/emotional & CCR supports	PLT, school-based EC leadership teams	Qtr 2-4	Qtr 1-4	Qtr 1-4	Qtr 1-4	Qtr 1-3
Engage community & parents	Increase parent awareness of CCR needs & EC with events, industry tours & college visits from MS through HS	School EC leadership team designee	Qtr 3-4	Qtr 1-4	Qtr 1-4	Qtr 1-4	Qtr 1-3

Project performance feedback will be gathered and used in several ways. The evaluation team will use data collected from program activity observations, school site visits, annual surveys, and IDOE administrative data to provide regular feedback on project progress (see E.2). The PLT will review that data, schools’ self-ratings on EC rubric progress, staff observations at site visits, meeting exit slips, PD evaluation surveys, and school input at network meetings to continuously improve the project’s approach, activities sequence, and timeframe. Each summer the PLT will review these data to set goals and plan activities for the upcoming year.

RECN is designed so that EC implementation in schools that join the project in subsequent years is faster and more effective, based on lessons learned in Years 1-2. When Tier 3 schools join, an accelerated yet viable schedule of implementation activities will be in place allowing them to move more quickly toward EC endorsement. As tools are created, strategies tested, and feedback collected, CELL will use lessons learned about sequencing and training content to help other rural IN HSs more quickly implement EC.

**D.3. Potential for Continued Support of Project:** CELL expects strategies for accelerating EC implementation and effectively networking schools will easily carry over to its overall EC and other initiatives. Improvements and refinements to existing materials, training, and outreach will be benefits generated by RECN. CELL plans to use RECN’s framework to create other EC networks for schools regionally located; with specific populations, such as additional rural schools, urban, and ELL; and/or with a STEM focus.

CELL will use data from RECN in its advocacy efforts with legislators and external funders to gain support for further EC expansion. In efforts to generate funding, CELL will inform IDOE and legislators about the financial support and teacher credentialing/incentives needed for ECHS launches and implementation.

CELL will disseminate information on RECN during the project and at its conclusion. CELL's publications, reaching well over 3,000 stakeholders, will share RECN information and invite schools for Tier 3. CELL's statewide EC Network, with HSs trained or endorsed, holds 2-3 meetings a year averaging 125 participants. CELL staff also serve on several ICHE, DWD, and state committees and will provide RECN updates at these meetings and EWIN events.

During the summers of 2022 and 2023, CELL will convene a conference for IN HSs and their HE partners, policymakers, and workforce development staff to showcase RECN schools and project outcomes. Social media and traditional communications will promote the conference and provide highlights during and after the event. The second conference – open to attendees from outside IN – will disseminate RECN findings and showcase project schools.

News articles will appear in each RECN school's community throughout the project, and CELL will contribute articles to scholarly journals and other media about RECN. CELL staff and RECN school leaders will present at state and national conferences such as the IN School Boards Assoc., IN Small and Rural Schools Assoc., National Assoc. of Concurrent Enrollment Partnerships, National Rural Education Assoc., etc. Marketing materials will share RECN's outcomes and highlights with school districts, funders, state agencies, and legislators.

CELL anticipates that the CRE established during RECN will continue to operate, refine activities, and expand membership. As noted earlier, RECN represents only 20 IN rural HSs and over 100+ HSs could benefit from a RECN approach as well as membership in a CRE.

**D.4. Extent to Which Costs Are Reasonable:** To determine whether the costs for this project are reasonable, the actual costs per student must be examined rather than the entire project budget. The grants-to-school portion of funding is the most relevant aspect for determining reasonable costs. Those grants total [REDACTED] over 5 years and when divided by 3,725 students, the cost per student is approximately \$ [REDACTED]. Even if other project costs were added in, approximately \$ [REDACTED] per student is still a reasonable cost, especially when further divided by two to four years of cohorts participating in RECN.

This investment in RECN serves as initial “start-up” costs as CELL builds EC capacity in IN, providing opportunities to students and addressing problems of practice for years beyond the project. This investment both serves students during the grant period and in the future by expanding EC opportunities and providing a better skilled workforce in subsequent cohorts.

**E.1. Quality of Evaluation Plan: Evaluation Methods Designed to Meet WWC Evidence**

**Standards Without Reservations:** SERVE Center at University of North Carolina at Greensboro (UNC-G) will lead the external evaluation. SERVE has studied the EC model for over 12 years, leading an Institute for Education Science (IES)-funded large-scale experimental study of ECs and five i3 program grants studying the implementation of EC in different settings. Resumes of key personnel from SERVE are included in the appendices.

*Impact study.* The impact study will address the first evaluation question (EQ1):

- EQ1. *What is the impact of the RECN EC program on key student outcomes, including a) attendance, b) on-track completion of college preparatory courses, c) receipt of college credits, and d) scores on college readiness exams?*

*Meeting WWC Standards without Reservations.* The impact evaluation is designed to meet WWC standards without reservations by using a Randomized Controlled Trial (RCT) for

incoming 9<sup>th</sup> grade students in EC programs within 15 treatment schools. CELL has determined implementation sites for the first two cohorts or tiers of schools. These schools have committed to using a lottery to determine 9<sup>th</sup> grade admission starting in Spring 2020. A key project activity in Year 1 will involve marketing EC programs to 8<sup>th</sup> graders and families to ensure oversubscription for the impact study. Although RECN will serve more students in cohorts not participating in a lottery, an estimated 750 treatment and 375 control students will be in the impact study sample across all cohorts. The table below summarizes the schools and students that will be part of each cohort's treatment and control groups. Cells in bold represent impacts assessed during the grant period. The sample sizes assume 50% oversubscription.

<b>Program Year</b>	<b>School Cohort 2 Begins; Cohort 1 Adds New Students</b>	<b>School Cohort 3 Begins; Cohorts 1 &amp; 2 Add Students</b>
Year 0 (2018-19)	Group 0-A 7th grade	Group 0-B 6th grade
Year 1 (2019-20)	Group 1-A 8th grade	Group 1-B 7th grade
Year 2 (2020-21)	<b>Group 2-A 9th grade</b>	Group 2-B 8th grade
Year 3 (2021-22)	<b>Group 3-A 10th grade</b>	<b>Group 3-B 9th grade</b>
Year 4 (2022-23)	<i>Group 4-A 11th grade</i>	<i>Group 4-B 10th grade</i>
Year 5 (2023-24)	Group 5-A 12th grade	Group 5-B 11th grade
# Schools	10	15
# Unduplicated Students in Sample	300 T; 150 C	450 T; 225 C

SERVE will conduct a lottery for each treatment school during the spring of students' 8<sup>th</sup> grade year from lists of student applications supplied by RECN schools using an approach developed as part of a 12-year longitudinal experimental study funded by IES (Edmunds, 2017). Lotteries may be stratified for demographic characteristics if appropriate. During the application

period, SERVE will include a parent consent form for using student data for the impact study. This will accompany other materials for IRB approval for human subject research at UNC-G.

For assessing RECN impacts, SERVE will use the model used to assess the impact of the North Carolina EC model with an RCT within an Intent-to-Treat (ITT) framework from Edmunds et al. (2017). The impact estimates will include fixed effects from each lottery (cohort within a treatment school), a treatment indicator, and theoretically relevant baseline demographic and academic characteristics of each student and school. The models will also incorporate weights for the probability of student selection for the EC program within each lottery. An ITT framework preserves integrity of random assignment because all students chosen for EC will be part of the treatment group, even if they do not enroll in the EC program.

*Power Analysis.* SERVE used the PowerUp! Program (Dong & Maynard, 2013) to conduct a power analysis using the model for Individuals Randomized within Blocks. The assumptions for the analysis include 30 treatment and 15 control students per school-cohort,  $p \leq .05$ , an intra-class correlation of .10, treatment effect heterogeneity of .20, and an  $R^2$  of .55 (Unlu, Fessler, Edmunds, & Glennie, 2015). The MDES by grade level is summarized in the table below. The MDESs for 9<sup>th</sup> and 10<sup>th</sup> grade are estimated separately because of the differences in the number of schools participating in different project years.

<b>Grade Level</b>	<b>T+C Sample Sizes for Outcomes by End of Year 3</b>	<b>MDES (SD)</b>
9 <sup>th</sup> Grade	1,125 students (in 25 cohorts in 15 schools)	0.17
10 <sup>th</sup> Grade	450 students (in 10 cohorts in 10 schools)	0.25

*Attrition.* We anticipate attrition will be low because we are using state administrative data that allows us to keep students in the dataset unless they move out of state or enroll in a private or home school. We will assess attrition overall and for treatment and control groups. Following WWC guidance (IES, 2017) if attrition is high and differential between the two groups, we will

assess baseline equivalence analysis using ITT assignment on pre-treatment covariates of socioeconomic status (free/reduced lunch status) and academic achievement (8<sup>th</sup> grade English and math state test scores). If necessary, we will conduct matching to ensure groups are equivalent.

## **E.2. Generation of Guidance About Effective Strategies Suitable for Replication:**

*Implementation study.* The implementation evaluation will assess two aspects of the EC model: 1) the execution of activities supporting the treatment schools and the RECN network, and concrete components in EC program schools and 2) progression in the CELL EC Core Principles. The main implementation evaluation will focus on the following questions:

- EQ2. *To what extent did the program implement a) school support and b) network support activities with fidelity?*
- EQ3. *To what extent did the treatment schools implement the CELL EC Core Principles? How did EC Core Principle implementation compare to implementation in other ECs without the endorsement and services from CELL?*
- EQ4. *To what extent did CELL integrate career readiness into the EC Core Principles?*

To answer EQ2, SERVE will create a tailored reporting tool for documenting project activities and collecting documents, similar to one created for an i3 EC evaluation in Ohio. SERVE will also conduct annual interviews with program staff from CELL and staff participating in mentor schools to document implementation. For EQ3, SERVE will assess EC Core Principle progression through annual school site visits and staff survey. More detail about the survey and site visits is included in D.4. For EQ4, SERVE will use data from interviews and documentation to report ways that CELL integrated career readiness into the EC Core Principles.

*Sustainability and scale study.* The evaluation will also focus on sustainable practices and scale by answering the following questions:



- EQ5. *In what ways did the program create sustainable rural EC practices?*
- EQ6. *To what extent did the program increase the number of a) endorsed EC programs and b) teachers credentialed to teach DC courses?*

To answer EQ5, SERVE will collect data from annual stakeholder interviews, network meeting observations and agendas as well as collect documentation of dissemination, school sustainability plans, and the EC endorsement process. The constructs explored in interviews and documents will align to the components in the Sustainable Rural EC Practices block of the logic model. For EQ6, SERVE will collect records of teacher credentialing and EC endorsements as well as relevant legislative and policy documents from CELL and RECN schools and districts.

Utilizing evaluation information. SERVE will share regular updates with the PLT through monthly evaluation calls and quarterly memos. Regular feedback will emphasize the implementation evaluation and align to the language of CELL's EC Core Principles. The evaluation will also provide recommendations and lessons learned after each project year to inform program iterations for the next cohort of schools. The program focus on network activities is a strength for sustainability and replication after the grant period. EQ5 explicitly addresses ways the program contributes to sustainable EC practices and will inform dissemination. At the grant's end, SERVE will also build case studies of EC environments in Indiana to document strategies for replication within the IN network and to other states.

**E.3. Valid and Reliable Performance Data on Relevant Outcomes:** For the impact study, all lottery data will be submitted to IDOE to match student treatment and control status to ID numbers in administrative data. SERVE will not obtain any data that directly links student names to ID numbers. Once matched, SERVE will use a student-level data set from IDOE that includes variables for treatment status, enrollment, test performance, race/ethnicity, ELL, disability status, and socio-economic

status as model covariates. The specific definitions for outcome variables that will be assessed for students in the treatment and control groups are included below. All measures are standard educational outcomes available for nearly all students in the impact sample and align to early indicators of progress for EC programs from prior research. The measures align to management plan objectives, either directly measuring them or predicting longer-term outcomes of HS graduation, post-HS college admission, credential attainment, and workforce readiness.

Attendance (9<sup>th</sup> and 10<sup>th</sup> grade). This is the percentage of school days attended.

College Preparatory Course Completion (9<sup>th</sup> and 10<sup>th</sup> grade). This outcome examines the percentage of students successfully completing core courses required for entrance into college, including 1) successful completion of Algebra I and English 9 by the end of 9<sup>th</sup> grade and 2) successful completion of a second high school math course, English 10, one science, and one social studies course by the end of 10<sup>th</sup> grade. Data come from student-level transcripts.

Receipt of College Credits (9<sup>th</sup> and 10<sup>th</sup> grade). This outcome includes student enrollment and credits earned in college level courses (DC or AP courses). Credit is determined by passing a DC course with a C or better or receiving a passing grade on the AP exam.

College Readiness Exams (10<sup>th</sup> grade). This outcome will use student scores on the PSAT, which is administered to all 10<sup>th</sup> grade students in Indiana.

#### **E.4. Clear Articulation of Components, Mediators, and Outcomes with Measurable**

**Threshold:** Fidelity of Implementation (FOI). A table in Appendix H displays Key Components and Indicators that will inform the full FOI matrix, the focus of EQ2. Program records will be used to measure the extent to which project activities are implemented as intended.

Mediators – The EC Core Principles. The eight EC Core Principles support outcomes addressed by the impact evaluation. To assess changes in implementation of EC Core Principles across all

schools, SERVE will develop and administer a staff survey in Years 1-5 that aligns to CELL’s rubric and to instruments from prior SERVE evaluations of EC programs. The full rubric is included in the appendices. The survey will also include items related to career readiness to support their integration into the EC Core Principles over the course of RECN. SERVE will also administer a survey each year with a matched comparison sample of IN HSs with EC programs that are *not participating* in CELL services determined by propensity score matching in Year 1 with public data. Each school with a  $\geq 50\%$  response rate will receive a \$ [REDACTED] incentive. Five years of survey data will allow analysis of changes in the EC Core Principles over time and by treatment status.

SERVE will also collaborate with CELL to select a sample of schools to take part in annual site visits. These full-day site visits will include classroom observations, staff interviews, and student focus groups. The visits will help to expand understanding of school-level changes in the EC Core Principles. These visits will focus heavily on the early-cohort schools to document a four-year progression in three Cohort 1 schools and a three-year progression in three Cohort 2 schools. The table below outlines the site visit plans.

<p><u>Year 1</u></p> <ul style="list-style-type: none"> <li>• Three mentor schools</li> <li>• Three Cohort 1 schools</li> </ul>	<p>Three mentor schools will offer an opportunity to generate an initial description and norming of high-level EC Core Principle implementation. Because they are participating in the intervention activities, SERVE will not visit these schools again. Baseline data will be collected for three of the Cohort 1 schools to understand early stages of EC implementation.</p>
<p><u>Years 2-4</u></p> <ul style="list-style-type: none"> <li>• Three Cohort 1 schools</li> <li>• Three Cohort 2 schools</li> </ul>	<p>SERVE will visit the same three Cohort 1 schools in Year 2 to document progression. SERVE will visit an additional three Cohort 2 schools to gather evidence of baseline EC implementation. These visits will be repeated in Years 3 and 4.</p>

## RECN PROJECT MANAGEMENT PLAN

The external evaluation will document progress aligned to the management plan, the logic model, and the performance measures. The objectives in the table below include a mixture of outcomes that are measureable within the grant period and those that will be achieved by the program following the grant period (and will not be officially measured for reporting).

### Key to Persons Responsible:

C—CELL staff; SS—School staff; PL—Project Leadership Team; E—Evaluation team; NS—Network Schools

GOAL 1. Increase college readiness and enrollment for students in RECN schools					
OBJECTIVES	ACTIVITIES	START	END	MEASURES	OUTCOMES
A. Increase awareness of EC program and EC benefits for 8 <sup>th</sup> graders and families	1.1 Hold outreach events about EC for 8 <sup>th</sup> grade students and families (SS)	11/1/19	8/30 ea. yr.	Records of outreach events, course enrollment records/DC course enrollment records	Increased EC application rates
B. EC students successfully pass at least 4 DC courses	1.2 Provide high quality PD for RECN teachers on rigorous instruction and CCR (C)	9/1/19	7/30 ea. yr.		Increased EC & DC enrollment & completion
C. At least 50% of EC graduates earn associate degrees, technical certificates, and/or general educ. cores	1.3 Implement wraparound student supports (SS)	9/1/19	Ongoing	Graduation rate data	
D. At least 95% of EC students graduate high school on time	1.4 Implement frequent, intentional advising by counselors, teachers, & leaders to keep students on track (SS)	9/1/19	Ongoing	Teacher transcripts/ letters of approval/credentialing from HE institutions	Increased # postsecondary credentials
E. 80% of EC graduates accepted to postsecondary	1.5 Implement a 4-year sequence of college visits for students (SS)	1/5/20 Yr. 1, by 1/15 ea. yr. after	6/30 ea. yr.		Increased acceptance to postsecondary institutions
F. At least 50% of the teachers needing to complete graduate coursework to be	1.6 Use the RECN network to share effective academic supports, data, & advising practices (C, PL, NS)	6/1/20	Ongoing	Baseline records of # teachers	

credentialed to teach dual credit courses achieve that credential by project's end.	1.7 Increase the number of teachers with dual credit credentialing by monitoring teacher progress, determining incentives, and creating a funding plan for teachers' credentialing. (C, PL, NS)	4/1/20 Yr. 1, 9/1 each year after	Ongoing	needing dual credit credentials compared to # at end of project	ECHS teachers credentialled to teach dual credit courses
<b>GOAL 2. Increase career readiness and opportunities for students enrolled in RECN schools</b>					
A. At least 95% of EC students participate in at least 3 WBL activities during HS	2.1 Engage businesses to create meaningful WBL opportunities. (SS, C)	6/1/20; 9/30 ea. yr. after	11/1 ea. yr. after.	Meeting minutes	Continuum of WBL activities that involve local businesses
B. At least 50% of EC graduates earn Work Ethics certificates	2.2 Create mechanisms to monitor student WBL participation. (NS, C)	8/30/20; 8/30 each year after	9/15/20; 9/15 ea. yr. after	Class records of WBL	Increased student WBL participation
C. At least 20% of EC students graduate with a technical certification	2.3 Provide intentional counseling & monitoring to keep students on track for earning industry certifications (SS)	6/1/20	Ongoing	School schedule changed, advisory curriculum completed	Work Ethics Certificate (WECs) programs established
	2.4 Implement advisory period & program (NS, SS)	6/15/20 Yr 2; 3/30 ea. yr after	1/5/21 Yr 2; 8/15 Yrs. 3-5	Meeting minutes, attendance records	Increased numbers of WECs earned
	2.5 Establish an Education-Workforce Partnership at each RECN school that meets regularly & create tools to support RECN schools (SS, C)	4/15/20; 10/15 each year after	7/31/20; 12/31 ea. year after	List of Work Ethics certificates earned	Increased completion of high-quality technical
	2.6 Design & offer Work Ethics certification in each RECN school (NS, C)	7/1/20 & ea. yr after	5/31/21 Yr. 3; 12/31 ea. yr.	Schedule of	
	2.7 Organize industry tours for students	4/1/20 Yr.	7/30/20		

	<p>in local/regional high-demand businesses &amp; industries (SS)</p> <p>2.8 Implement externships &amp; industry tours for teachers &amp; counselors in local/regional high-demand businesses &amp; industries (SS)</p> <p>2.9 Create parents events to increase awareness of industry needs &amp; training options (NS, SS)</p>	<p>1, by 9/15 ea. yr after</p> <p>8/30/20 Yr. 2; by 6/15 ea. yr after</p> <p>6/1/20 Yr. 2; by 4/15 ea. yr after</p>	<p>Yr. 1; by 12/31 ea year after</p> <p>4/1/21 Yr. 2; 9/1 ea. yr after</p> <p>9/15/20 Yr. 2; 9/15 Yrs. 3-5</p>	<p>tours, attendance lists</p> <p>Records of participation</p> <p>Schedule of events, records of participation</p>	<p>certifications</p> <p>School staff's career awareness updated and expanded</p> <p>Parent awareness of local careers increased</p> <p>Better prepared graduates for the workforce</p>
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**GOAL 3. Improve efficiencies and build capacity for schools participating in RECN**

<p>A. At least 6 of the 15 Tiers 1-3 schools earn the EC endorsement by project's end.</p> <p>B. Tiers 1-2 schools accelerate the rate of EC implementation by 1.5 years as compared to Tier 3 schools.</p> <p>C. Each school improves its baseline rating on the 8 EC Core Principles rubric to a 4- or 5- rating by project's end.</p>	<p>3.1 Create networking &amp; PD opportunities for RECN schools to promote more effective, efficient EC implementation</p> <p>3.1a Organize a network of Mentor schools &amp; mentee schools (Tiers 1-3 schools later) (C)</p> <p>3.1b Mentor schools meet &amp;/or communicate with partner schools regularly. In meetings and PD, focus on improving each school's needs per their EC rubric ratings. (NS)</p> <p>3.1c Reassess each school's progress annually &amp; adjust PD accordingly (NS)</p>	<p>1/5/20; add 5 schools/yr in Yrs. 2-4</p> <p>9/1/19 in Yr. 1, then ongoing</p> <p>By 10/1</p>	<p>2/5/20</p> <p>2/1/20 in Yr. 1, then ongoing</p> <p>By 5/1</p>	<p>CELL records of EC implementation; annual results or "lessons learned" from meetings, PD</p> <p>CELL records of EC endorsements granted and EC portfolios</p> <p>Baseline rating</p>	<p>Each RECN school continually improves their EC rubric ratings</p> <p>EC implementation of the 8 Core Principles accelerated in RECN schools</p>
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<p>D. 100% of RECN schools have viable sustainability plans</p> <p>E. CELL has developed comprehensive plan for scaling project to other rural HSs in the state</p>	<p>3.1d Create a mechanism to share “lessons learned” from Tier 1 &amp; 2 schools to accelerate Tier 3 schools’ EC implementation (PL, C)</p>	<p>each year</p> <p>6/1/21</p>	<p>each year</p> <p>9/30/21</p>	<p>on EC Rubric in Year 1 compared to Year 5 rubric ratings</p>	<p>EC endorsement status accelerated and achieved by RECN schools</p> <p>Schools each create EC sustainability plans</p> <p>CELL implements a project scaling plan</p>
	<p>3.2 Build in a process for regular advising &amp; interactions with CELL &amp; other RECN schools to expedite EC endorsement.</p>	<p>9/30/20 Yr. 2; by 9/30 each year after</p>	<p>5/31/21 Yr. 2; by 5/31 each year after</p>	<p>School records, commitment letters, MOUs from partners</p>	
	<p>3.3 Explore new EC pathways by leveraging the network to enhance existing &amp; create new partnerships with businesses &amp; higher education</p>			<p>Marketing plan, lessons learned documents, campaign materials, conference presentations</p>	
	<p>3.3a Assess potential pathways for schools to add by examining current course offerings, local/regional business/industry needs, and HE partner courses. (NS, C)</p>	<p>10/1/20 Yr. 2; by 12/31 in yrs. after</p>	<p>12/1/20 Yr .2; by 3/31 in yrs. after</p>		
	<p>3.3b Facilitate meetings among schools, business/ industry, &amp; HE to enhance career awareness/readiness. (C)</p>	<p>6/1/20 Yr. 2; by 9/1 ea. yr after</p>	<p>8/15/20 in Yr. 2; 3/31 each year</p>		
<p>3.4 Develop sustainability plans for each RECN school while identifying mechanisms to scale the project to additional HSs. (PL, NS)</p>	<p>6/1/20 Year 2</p>	<p>Ongoing till project ends</p>			

*Key to Abbreviations Used in Chart (in order of appearance):*

**RECN**-- Rural Early College Network; **EC** --Early College; **DC** –Dual Credit; **CCR** --College & Career Readiness; **PBL**--Project-Based Learning; **HS**--High School; **HE**—Higher Education; **ECHS**—Early College High School; **WBL**—Work-Based Learning; **WEC**—Work Ethics Certificate; **PD**—Professional Development; **MOUs**—Memorandum of Understanding

## Bibliography

- American Institutes of Research and SRI International. (2013). *Early College, early success: Early College High School Initiative impact study*. Washington, D.C.: American Institutes of Research.
- Dong, N. & Maynard, R. (2013). *PowerUp!: A tool for calculating minimum detectable effect sizes and minimum required sample sizes for experimental and quasi-experimental design studies*. *Journal of Research on Educational Effectiveness*, 6(1), 24-67.
- Edmunds, J. A. (2017). *A lottery-based experimental study: Examining the impact of early colleges*. SAGE Research Methods Cases.
- Edmunds, .T. A., Bernstein, L., Unlu, F., Glennie, E., Willse, .T., Smith, A., & Arshavsky, N.(201 2). *Expanding the start of the college pipeline: Ninth-grade findings fi-om an experi- mental study of 'the impact of the Early College High School model*. *Journal of Research on Educational Effectiveness*, 5, 136-159.
- Edmunds, J. A., Unlu, F., Glennie, E., Bernstein, L., Fesler, L., Furey, J., & Arshavsky, N. (2017). *Smoothing the transition to postsecondary education: The impact of the early college model*. *Journal of Research on Educational Effectiveness*, 10(2), 297-325.
- Georgetown Center on Education and the Workforce. (2014). *Recovery: Job growth and education requirement through 2020*. Washington, D.C.: Georgetown University.
- Georgetown Center on Education and the Workforce. (2015). *The economy goes to college: The hidden promise of higher education in the post-industrial service economy*. Washington, D.C.: Georgetown University.



- Georgetown Center on Education and the Workforce. (2016). *America 's Divided Recovery: College haves and have-nots*. Washington, D.C.: Georgetown University. Retrieved from <https://cew.georgetown.edu/wp-content/uploads/Americas-Divided-Recovery-web.pdf>
- IBM. (2017). *IBM P-TECH: Helping Graduates Blaze Diverse Pathways to Success*. Retrieved from [https://www.ibm.com/blogs/citizen-ibm/2017/01/davis\\_dec\\_2017\\_p-tech\\_grads.html](https://www.ibm.com/blogs/citizen-ibm/2017/01/davis_dec_2017_p-tech_grads.html)
- Indiana Career Council. (2014). *Indiana Plan & Launch Sector Partnership Initiative*. Retrieved from [http://www.in.gov/icc/files/Indiana\\_Plan\\_and\\_Launch\\_Sector\\_Partnership\\_Initiative.pdf](http://www.in.gov/icc/files/Indiana_Plan_and_Launch_Sector_Partnership_Initiative.pdf)
- Indiana Commission for Higher Education (ICHE). (2016). *CELL Comparative Statistics*.
- Indiana Commission for Higher Education. (January 2019). *Early college credit: Dual credit, AP & the broader landscape of earning college credits in high school*. Indianapolis: Indiana Commission for Higher Education.
- Institute of Education Sciences. (October, 2017). *What Works Clearinghouse procedures and standards handbook: Version 4.0*. Retrieved from [https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc\\_standards\\_handbook\\_v4.pdf](https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc_standards_handbook_v4.pdf)
- McShane, M. & Smarick, A. (ed). (2018). *No longer forgotten: The triumphs and struggles of rural education in America*. Lanham, Maryland: Rowman & Littlefield.
- Unlu, F., Edmunds, J., Fesler, L., & Glennie, B. (2015). *A preliminary assessment of the cost and benefit of the North Carolina's Early College High School model and its impact on postsecondary enrollment and earned college credit*. Paper presented at the Spring 2015

Conference of the Society for Research on Educational Effectiveness. Retrieved from  
<http://files.eric.ed.gov/fulltext/ED562097.pdf>