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CFDA 84.411 C
Early Phase Application

Second Step® to Enhance Rural Students' Achievement and Wellbeing

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Significance

Project Second Step® will address the social-emotional needs of rural youth by increasing professional development and implementation coaching access for their educators. The assembled team combines strengths of the Wood County Cooperative (WCC) districts, the Committee for Children (CFC, Texas State University (TXST), the University of Oklahoma (OU), and WestEd. WCC districts are located in highly diverse, underserved, and high-need rural communities. TXST is a Minority Serving Institution (MSI) offering undergraduate and graduate programs in education, in addition to its standing as an R2 research university. OU offers both undergraduate and graduate programs in education and is an R1 research university. The CFC is a non-profit that specializes in social- emotional learning programs. WestEd is a research, development, and services agency that works with education and other communities.

Project Second Step® addresses **Absolute Priorities 1** and **4** and **Competitive Priority 1**. Specifically, we aim to develop observation tools to support implementation fidelity, create a professional development model, and design coaching protocols based on educator need to support implementation of the Second Step® digital curriculum, a 20-lesson social-emotional learning (SEL) program, in high-need rural districts that struggle with limited staffing and geographic isolation. We aim to (a) learn what additional implementation supports and resources are needed to implement an SEL program well in rural schools, (b) develop a coaching model and resources based on this learning, (c) test the coaching model, and (d) evaluate the coaching model for effectiveness (*see* Appendix A, Figure 5 conceptual framework). We anticipate that the project will result in an innovative multi-tiered coaching model for SEL implementation that is effective for high need rural schools, building upon the current implementation coaching models.

Rural Schools: Challenges of Equity and Access for High Need Learners

Over 12 million students attend rural schools in the United States (National Center for Education Statistics & Institute of Education Sciences, 2020). The Rural School and Community Trust found that although overall National Assessment of Educational Progress (NAEP) performance is on par with the national average, rural schools in impoverished areas score significantly lower than their more adequately resourced rural, suburban, and urban peers (Showalter et al., 2000). Rude and Miller (2018) identified five challenges of education in rural communities including (a) problems with defining rural education, (b) economic hardship and poverty, (c) ongoing and pervasive personnel shortages, (d) resource disparities, and (e) lack of training to address increases in the diverse needs of rural learners. Compared to their non-rural peers, students in rural schools are more likely to be exposed to childhood neglect, abuse, and trauma (National Advisory Committee on Rural Health and Human Services & U.S. Department of Health & Human Services, 2018) and to live in poverty (US Department of Agriculture, 2019). Rural students are also more likely to be diagnosed with a disability than their suburban and urban counterparts but are significantly less likely have access to appropriate instruction, intervention, and services (Zablotsky & Black, 2020). Both rural students and their teachers face significant and pervasive barriers in the form of lack of access to resources and opportunities (Berry & Gravelle, 2018).

A sparse literature base contributes to the rural school challenges, as confirmed by an Institute of Education Sciences study by Tipton and colleagues (2021). This hurts the generalizability of research and complicates identifying variables that may enhance or detract from the effectiveness and adoption of interventions in rural schools. Often research is replicated in rural schools; rather than developed with and for rural schools from the beginning. We propose and novel and innovative project that will capitalize on rural strengths while addressing unique support needs.

Importance of Social-Emotional Learning in Schools

The implementation of SEL interventions have helped to decrease conduct problems, emotional distress, substance abuse, high-risk sexual practices, and school disengagement among students across demographic categories including age/grade, race/ethnicity, socioeconomic status, and geographic location (Goldberg et al., 2019). Cipriano and colleagues' 2023 meta-analysis of 424 studies of school-wide SEL interventions found that students experienced significantly improved skills, attitudes, behaviors, peer relationships, academic achievement, and school climate, safety, and functioning when compared to control conditions. While there is an established research base for SEL interventions generally, there are comparatively few studies that focus on the implementation of SEL interventions in rural schools or districts. For example, although locale was not clearly specified in several of the 424 included studies, the Cipriano et al. synthesis and meta-analysis noted only 4% (n = 19) were conducted with rural schools (Cipriano et al., 2023). Challenges often facing rural localities include competing disciplinary philosophies, increased training needs, and lack of time, resources, and support, which greatly impedes the design, implementation, and sustainability of SEL initiatives (Fitzgerald et al., 2014). Further compounding issues facing rural localities are initiatives that fail to take into account the thoughts, feelings, and perceptions of educators who must implement them and the children who receive them (Cavanaugh & Swan, 2015). Therefore, greater attention to professional development and coaching is needed to understand fidelity of implementation in high need rural schools.

Professional Development and Coaching to Support Rural Educators

Coaching is a professional learning activity that happens consistently within the classroom context and is used to implement and extend professional development and training teach-

ers receive (Cusmano & Preston, 2018). There are several models that have the potential to support rural educators including observational coaching (Reddy et al., 2021), side-by-side coaching (Munson & Dyer, 2023), and coaching providing feedback based on recordings of classroom instruction (Clark et al., 2022). Observational coaching involves observation by a coach, where they take notes, and then provide feedback to improve teacher practices. Side-by-side coaching allows for observation in situ – the coach observes live teaching, provides the teacher feedback, models strategies learned during teacher professional development, and allows time for reflection, analysis, and discussion. During side-by-side coaching, coaches may directly intervene during instruction and provide opportunities for the teacher to practice doing what the coach modeled while the coach provides feedback, allowing the teacher to practice the strategy and reducing errors in implementation practice. Video Coaching where teachers record lessons and review video involves an expert coach who is not able to provide coaching during live observations due to logistical barriers or time constraints (e.g., coaches from outside a school district, coaches serving multiple schools; Clark et al., 2022). Quality coaching, regardless of model, includes use of well-trained coaches, emphasizes strategies to improve student engagement, provides structured feedback, and is non-evaluative in nature (Thompson et al., 2012; Walters, 2014).

Kretlow and Bartholomew's review of coaching studies noted that teachers experienced the most success in coaching scenarios where they were provided with individual follow-up, support, and coaching after an initial professional development training (2010). Further, professional development support *for the coaches* helped them support teachers to learn new ways of delivering lessons, as well as to encourage the teachers to *use* their newly learned practices. Although there is a rich body of literature demonstrating positive outcomes of coaching, less is known about applications in rural locales, which have unique strengths and challenges, including access,

human capital, and geographic limitations. A university-rural school partnership is one way to ameliorate rural access to professional development, implementation coaching support, scarcity of district level curriculum specialists, and geographic isolation. In the partnership, each brings together and shares the assets they possess (Sanzo et al., 2011). All the coaching models have merit and allow utilization of rural strengths of a strong sense of community and commitment to improving outcomes for children (Berry & Gravelle, 2018).

Project Second Step® will develop and test a coaching model that incorporates teachers' thoughts, perceptions, and preferences that leverage rural community strengths to addresses the unique professional development needs of rural educators. The project will test the effects of a professional development program – by providing ongoing coaching and feedback – on the fidelity of implementation of the Second Step® Elementary SEL curriculum and evaluate student outcomes in high-needs rural schools. Because rural schools have a strong sense of community and relationships are central, having both face-to-face and online coaching is beneficial. The lack of access to curriculum specialists and instructional coaches in rural localities can be addressed by side-by-side, coaching using video recordings, and individualized feedback from expert coaches who are not employed by the district (Clark et al., 2022). This allows teacher leaders in rural buildings to learn through a train-the-trainer model using remote observation and coaching (Randolph et al., 2020) and has the potential to provide an unobtrusive way to coach a teacher in their own classroom. The overall goal is to gradually shift coaching responsibility to school-level master teachers with support from the district psychologists and behavior specialists. The project will result in an SEL coaching implementation program tailored to leverage the strengths and opportunities in rural schools to increase academic and behavioral outcomes for high need students.

Project Design

As displayed in our Logic Model for Project Second Step® (See Appendix G), we will develop a coaching package for teachers on the implementation of the Second Step® curriculum. Given that many teachers in rural schools work under emergency, alternative, or non-traditional certification or in substitute teaching roles with limited previous training, we predict that additional coaching will be necessary to help the participating teachers to implement the Second Step® Elementary program with fidelity and improve academic and social outcomes for students.

Project Goals and Objectives

This project concerns the implementation of SEL curricula in high-need rural schools (i.e., 50-80% of students receiving free and reduced lunch, geographic isolation, under and inadequately staffed). As discussed, there are many barriers that may prevent rural schools from implementing a high-quality SEL curriculum with fidelity, which in turn would limit the positive outcomes students and schools experience. For this project, we plan to identify the most salient barriers that rural schools face in implementing an SEL curriculum and develop interventions and supports that could be used by rural educators to address these barriers. Table 1 provides goals, objectives, measures, and outcomes that we will address through this project.

Table 1. Project Goals

Goals and Objectives	Measures	Outcomes
1. Explore potential barriers to the adoption and implementation of the Second Step Elementary digital curriculum in high-needs rural districts.		
1.1 Observe Second Step Initial Training and educator attendance 1.2 Observe Second Step Implementation (4 units with 5 lessons x 20 teachers x 15 students) 1.3 Identify Second Step Barriers with Educators	1.1 Educator Attendance Logs 1.2 Fidelity of Initial Training Observation Protocol 1.3 Fidelity of Implementation Observation Protocol 1.4 Interview & Focus Group Transcripts	Process 1: Iterative analysis of program implementation Project 2: Number and type of barriers identified Project 2: Number and type of changes to the Second Step initial training based on identification of barriers

Goals and Objectives	Measures	Outcomes
(students, teachers, administrators, advisory board)	1.5 PI Meeting Monthly Minutes 1.6 Annual Evaluation Report 1.7 Cost Effectiveness Analysis	*Program 1&2: Number of students served Program 3: Updates to the project design based on the external evaluation Program 4: Annual evaluation with student academic and social outcome measures
2. Identify and pilot training and coaching that are needed to support teachers implementing the Second Step with fidelity.		
2.1 Interview teachers about training needs 2.2 Develop training and coaching materials 2.3 Pilot test training and coaching materials with rural teachers	2.1 Number of training and coaching documents created 2.2. Interview & Focus Transcripts 2.3 Implementation & Coaching Logs	Process 1: Iterative analysis of program implementation
3. Evaluate the effects of a professional development program including ongoing coaching and feedback on the fidelity of implementation of the Second Step Elementary digital curriculum by teachers working in high-needs rural schools.		
3.1 Develop fidelity of implementation (FOI) measure of Second Step Elementary digital curriculum 3.2 Develop FOI measure of training and coaching 3.3 Analyze the relation between training and coaching and fidelity	3.1 FOI measure of Second Step Elementary digital curriculum 3.2 FOI of training and coaching	Program 3: Updates to the project design based on the external evaluation Program 5: Annual evaluation that includes sufficient detail for replication
4. Evaluate the effects of the implementation of the Second Step Elementary digital curriculum on high-needs rural students' academic achievement (e.g., reading and mathematics), attendance, social-emotional competency, classroom behavior, perceptions of school climate, and disciplinary referrals and suspensions.		
4.1 Recruit schools, teachers, and students for evaluation study 4.2 Conduct evaluation study 4.3 Analyze evaluation study data 4.4 Complete evaluation report	4.1 School records 4.2 Devereux Student Strengths Assessment 4.3 Behavioral Observation of Students in Schools 4.4 Georgia Student Health Survey 4.5 Social-Emotional Competence Teacher Rating Scale	*Program 1&2: Number of students served Program 3: Updates to the project design based on the external evaluation Program 4: Annual evaluation with student academic and social outcome measures Program 5: Annual evaluation that includes sufficient detail for replication

Goals and Objectives	Measures	Outcomes
	4.6 Teacher Sense of Self-Efficacy Scale	Program 6: Cost per student

*Note: Participating schools are considered high needs rural schools. Data will be disaggregated by students by free and reduced lunch, students with disabilities, dual language learners, students from underrepresented minority communities, and students from non-white minority groups.

Wood County Cooperative

Wood County Cooperative (WCC) includes 5 rural Local Education Agencies (LEAs) who work collaboratively to provide instruction, intervention, and special education support through a shared services agreement: Alba Golden Independent School District (ISD), Hawkins ISD, Mineola ISD, Quitman ISD, and Yantis ISD. WCC school districts are representative of challenges facing many rural schools: teacher shortages, particularly in high needs areas such as special education, math and science, a rise in students who are experiencing poverty, food insecurity, COVID-related issues, other adverse childhood experiences, and increases in students in need of special education services (Showalter et al., 2019). A significant percentage of teachers in the district are working under emergency, alternative, or non-traditional certification or in substitute teaching roles. Between 50% to 80% of students in the WCC districts are eligible for free or reduced-price lunch, which is often used as an indicator of poverty level. Approximately 10% of students attending WCC districts receive special education services, and referrals for special education services due to social, emotional, and behavioral needs have nearly doubled over the last two years across districts. Surveys of WWC district superintendents noted that student behavior, substance abuse by students and families, and academic deficits were the most pressing issues. Additionally, each district has implemented academic, multi-tiered systems of support, but each has experienced problems with fidelity of implementation due to staffing shortages, turnover, and professional development access.

Two dedicated psychologists and a behavioral specialist serve 5 districts, as well as a center-based program for students with challenging behavior. Due to the significant number of referrals, the psychologists struggle to complete evaluations for special education, which results in little capacity to support educators at the classroom level. Despite these challenges, each of the districts has maintained an overall "C" rating for academics from the Texas Education Agency. However, there are significant academic discrepancies between students from minority backgrounds and students identified with a disability scoring well below district averages. Two of the 5 districts have implemented an academic progress monitoring system (MAPs) to track academic and behavior within districts, with the hopes of expanding the system to all districts and sharing information across districts. See Appendix J Table 2 for WWC demographics.

Despite a strong sense of community and willingness to engage in professional development, WCC schools have not had access to coaching and supports. The nearest educational service center is over 2 hours away, and the nearest research university is approximately 1.5 hours away. These conditions, typical of rural schools in the south, make it extremely difficult to provide Tier 1 instruction without quality professional development and coaching. The purpose of Project Second Step® is to develop a coaching model that leverages rural strengths to address challenges of rural practice, leads to increased educator capacity and school climate, increases student academic performance, and decreases disciplinary referrals.

Second Step® Elementary Program and Coaching for Implementation Fidelity

The Second Step® Elementary digital program is a Tier 1 SEL curriculum provided through an online format. It is based on previous print versions of the Second Step® Elementary program that have been empirically evaluated and shown to positively impact the academic

achievement, behavior, and social-emotional development of students. The program is implemented in teacher-facilitated group settings and includes four units: Goal Setting, Emotion Management, Empathy and Kindness, and Problem-Solving (See Appendix J for a summary of the Second Step® Program). Each unit is made up of five lessons, for a total of 20 lessons in the curriculum. Lessons are tailored to each grade level kindergarten to 5th grade, with each lesson ranging in time for 20 to 45 minutes. Lessons include scripted instruction and ideas for student discussion and engagement.

Previous evaluations of the Second Step® Elementary program in urban and suburban schools indicate that implementation of the curriculum increases teacher capacity to address social-emotional needs of students, decreases disciplinary referrals, and increases student academic achievement. However, given the high percentage of rural teachers who have emergency certification or who are substitute teaching, it is expected that rural teachers will struggle with implementing the curriculum with fidelity without additional supports. Teachers have experienced significant difficultly with reading and mathematics program implementation fidelity; therefore, we will develop a tiered coaching program to assist rural teachers with implementing the curriculum in their classrooms. We anticipate that providing coaching and supplemental resources will increase the fidelity of implementation of the curriculum, which will impact the effectiveness of the program for addressing the SEL needs of high-need rural students.

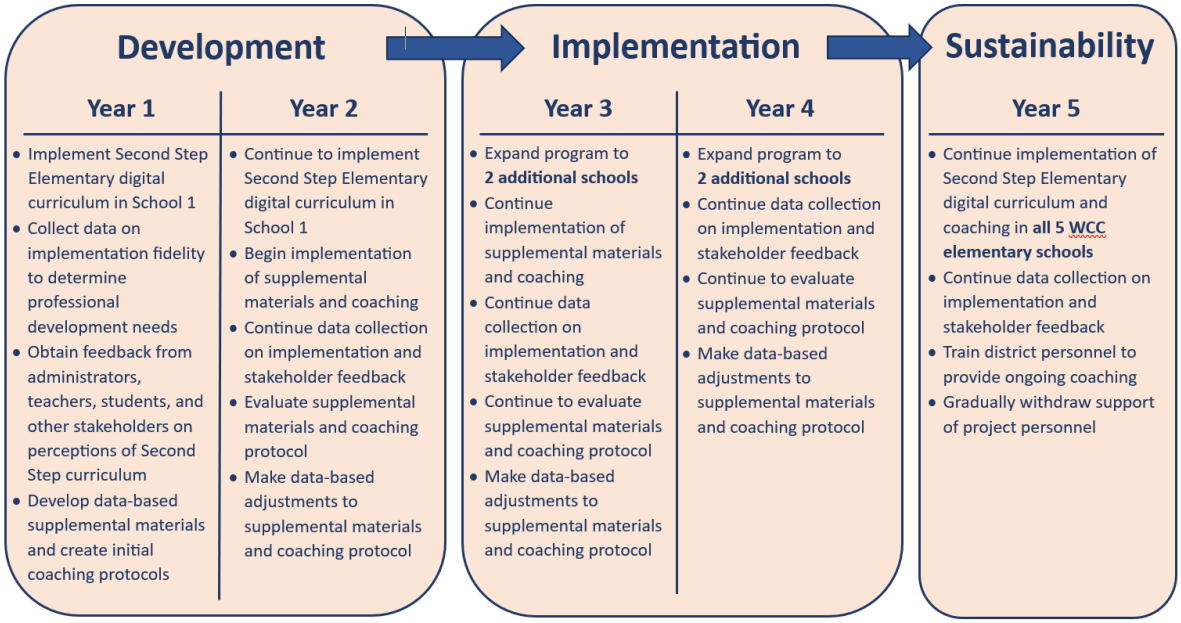
We will develop and evaluate a sustainable coaching program that can be used to promote high-fidelity implementation of the Second Step® Elementary digital curriculum. Research supports the use of coaching as a method for promoting high-quality curricular implementation (Doyle et al., 2023; Meyers et al., 2019). There are multiple formats for coaching that are supported by the literature, and we will explore several possible variables for developing the most

effective, efficient, and sustainable coaching model for use in rural schools. Multiple coaching formats (e.g., supervisory, side-by-side), ways for delivering feedback (e.g., bug-in-ear, live following sessions, delayed video-based), and settings for coaching (e.g., in-person, virtual) when developing coaching protocols (Brock et al., 2016). Initially, coaching will be provided by members of the research team while protocols are being developed and evaluated; later, we will identify staff at the participating schools to serve as coaches and train them on the protocol.

Project Overview

The project includes 3 phases: (1) development phase, (2) implementation phase, and (3) sustainability phase. The methods for conducting this project will be iterative in nature, in that the changes to the project will be made based on information from previous phases, which allows for flexibility in addressing the needs of our collaborating school districts; however, there is a general structure to the project that is outlined below (see Figure 1).

Figure 1. Year-By-Year Summary Project Second Step®



Development Phase. The development phase will take place during Year 1 & 2. The goal of the development phase is to explore barriers to the adoption and implementation of the Second Step® Elementary digital curriculum in high-needs rural school districts, to identify implementation supports that would be needed to support teachers implementing the program with fidelity, and to pilot those supports. We will do this by first implementing the curriculum as designed in a traditional rural elementary school that is representative of the elementary schools across the WCC districts. This will allow us to develop an understanding of the unique contexts of rural schools, gain insight into educator and student perceptions, modify and enhance the curriculum, and address professional development and coaching needs based on feedback from teachers, administrators, and related service personnel who provide support to teachers.

Second Step® SEL lessons will be observed daily by project or district personnel to measure teacher implementation fidelity. We will also collect data on student and teacher perceptions of the Second Step® curriculum using questionnaires and focus groups. We will use the information collected to adapt and modify the curriculum to meet teacher and student needs and to create supplemental materials and training for teachers. This approach leverages the strengths of rural schools, including collaborative work and deep investment in student outcomes, to support the development of observation protocols, curricular supplements aimed at addressing the unique needs of rural students, and additional training and coaching for teachers.

During Year 2, we will implement and evaluate the supports, supplements, and trainings developed with data from Year 1. As we evaluate, we will continue to make changes to the supports being offered to best meet the needs of the rural teachers and students (i.e., iterative development). The training products and supplements developed during Year 1 and Year 2 will serve as the basis for scaling up the intervention during subsequent phases of the project.

During this time, we will also be training project and district personnel who will serve as coaches during later phases of the project, and creating a train-the-trainer model. Coaches will be trained in observation and coaching protocols to prepare them for working with teachers. Five coaches will be trained, one for each school participating in the project.

Implementation Phase. During Year 3, we will implement the enhanced Second Step® Elementary digital curriculum developed during Year 1 & 2 in additional elementary schools in the WCC. The enhanced curriculum will include the lesson supplements, protocols, professional development, and coaching components. Two district elementary schools will be randomly selected to implement Second Step® in Year 3 and two schools will continue with their current programming to allow for comparisons in disciplinary referrals, reading and mathematics progress, special education referrals, and school climate. In Year 4, the two schools who were used as comparison will implement the program. Therefore, by the end of Year 4, we will have implemented and evaluated the use of the enhanced Second Step® digital curriculum in 5 elementary schools. Grand Saline Independent School District will serve as a comparison school district. See Appendix J for demographics which align with Wood County.

Sustainability Phase. Year 5 will be the sustainability phase of the project, where support of project personnel is gradually withdrawn and the capacity of district personnel to support teachers in the implementation is increased. We will identify personnel from WCC (including administrators, behavior specialists, and mentor teachers) who can serve as coaches after the project is completed. Using a train-the-trainer model, these individuals will receive intensive training in coaching practices, observe coaching being provided by project personnel, and gradually take over more coaching duties until they are providing all coaching for teachers implementing the

curriculum. This plan will allow for sustainability of the project incorporating the coaching model that was developed and tested.

Project Personnel

The project team includes nationally recognized experts in social-emotional learning ([redacted]); coaching and intervention implementation ([redacted]); assessment and evaluation ([redacted]); school administration and program implementation ([redacted]); and project coordination. In addition to their individual areas of expertise, team members have relevant experience in school/research partnerships to conduct educational research and evaluation, as well as managing federal grants.

Our team includes members who represent the diversity of our rural schools with respect to gender, ethnicity, disability status, and sexual orientation. We will encourage applications for trainers and lead positions in schools from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability by using the 9 strategies outlined by the Regional Education Lab- Northwest for recruiting, hiring, and retaining diverse teachers (Institute of Educational Sciences, 2022) and leverage our partnership with TXST to support project recruitment. Figure 2 includes a summary of key personnel qualifications, roles, responsibilities, and time and effort. See Appendix B and Appendix J for more detailed qualifications and personnel loading charts.

Figure 2. Qualifications, Roles, & Time Commitments of Key Personnel (Appendix B Resumes)

Principal Investigator, [redacted], Ph.D., LSSP. Commitment: Years 1-5 0.10 FTE
[redacted] will oversee the project, district implementation, and annual reporting requirements. She will coordinate data sharing and lead weekly PI meetings. [redacted] is responsible for oversight of social-emotional and behavioral support; intervention; and special education programming for five rural districts for years 1-5. She has over 30 years of experience serving in

numerous school administration roles across rural districts, and she has more than a decade of experience overseeing the management of state and federal funding.
Co-Principal Investigator, [redacted], Ph.D. Commitment: Years 1-2 0.5 FTE
[redacted] will provide the Second Step® 1-day professional development and will support coaching content development throughout the project. [redacted], a national expert in SEL, leads the research team at CFC, developing and executing content development, implementation improvement, and research, evaluation, and measuring product success and impact.
Co-Principal Investigator, [redacted], Ph.D., BCBA-D, LBA-TX. Commitment: Year 1 0.5 FTE & 2 weeks match. Year 2 0.15 FTE for 9 mos. & 0.10 FTE for 3 mos. & 2 weeks match. Year 3 0.15 FTE for 9 mos. & 0.10 FTE for 3 mos. Year 4 0.15 FTE. Year 5 0.25 for 9 mos. & .75 FTE for 3 mos.
[redacted] will lead weekly coaching meetings, develop protocols and professional development programming, and lead dissemination efforts. [redacted] has more than 20 years of experience leading academic and behavioral intervention implementation in collaboration with rural school districts and disseminating results of projects in collaboration with rural communities. [redacted] has extensive experience managing state and federal grants.
Coaches [redacted], Ph.D., BCBA. Commitment: Years 1-5 0.1 for 9 mos. & 0.33 FTE for 3 mos. [redacted], **Ed.D., BCBA-D, LBA-TX.** Commitment: Years 1-4 0.177 FTE. Year 5 0.091 FTE [redacted], **M.Ed.** and [redacted], **M.Ed., BCBA.** Commitment: Years 1-5 1.0 FTE
[redacted] will develop protocols, professional development programming, and support dissemination efforts. [redacted] and [redacted] will implement protocols and professional development programming. The coaches will participate in weekly coaching meetings. [redacted] have extensive experience implementing social, emotional, and behavioral supports at the district level, and [redacted] is a national expert in coaching. [redacted] is a national expert in training and development, with over 20 years as a teacher, instructional coach, and special education director. [redacted] has 6 years of experience providing professional development and coaching to support educators in implementing social, emotional, and behavioral interventions.
Lead Evaluator & Co-Principal Investigator, [redacted], Ph.D. Commitment: Years 1-5 0.09 FTE
[redacted] will serve as lead evaluator. [redacted] work advances research and evaluation in learner variability and special education grounded in an MTSS framework, with emphasis on PBIS and the evaluation of social, emotional, and behavioral interventions and programs. [redacted] has more than 100 peer-reviewed publications.
Administrative Assistant Commitment: Years 1-5 0.5 FTE
A 0.5 FTE administrative assistant will be hired to coordinate coaching sessions and observations, process project-related travel, and provide grants management support. Administrative support is available at each partner site to support project coordination.
School Psychologists Commitment: Years 1-5 0.20 FTE
Two licensed school psychologists will observe program implementation during Years 1 to 4 and implement coaching in collaboration with lead teachers and the behavior specialist. In Year 5, they will attend monthly meetings and support project implementation.
Behavior Specialist Commitment: Years 1-5 0.20 FTE

A certified behavior specialist will observe program implementation during Years 1 to 4 and implement coaching in collaboration with lead teachers and the behavior specialist. In Year 5, the behavior specialist will attend monthly meetings and support project implementation.
Lead Teacher Commitment: Year 5 0.10 FTE
A lead teacher will be selected during the sustainability phase of the project. In Year 5, the lead teacher will assume responsibility and be a school-based "go-to" and coach for implementation in collaboration with the school psychologists and behavior specialist.
WCC Advisory Board Commitment: Years 1-5 ½ day x 2 per year
The Wood County Cooperative has an advisory board that includes parents, caregivers, community members, and students. The advisory board will meet two times per year with the PIs, providing feedback and recommendations based on the evaluation and coaching progress.

Management Plan

Roles and Responsibilities

[redacted] will lead the project in collaboration with [redacted]. [redacted] will lead the coaching team including [redacted], [redacted], and [redacted] will facilitate the introductory professional development and provide consult on the Second Step® curriculum. [redacted] will lead evaluation efforts. Weekly project meetings will include [redacted]. Coaching meetings will also be held weekly and evaluation meetings biweekly. School-based meetings will also occur as the project develops with coaches and [redacted]. Figure 2 includes a summary of roles and responsibilities. An agenda will be posted prior to each meeting in a shared folder and minutes will be completed during each meeting that include project updates, budget review, and action items to ensure on-time completion of project objectives. An organizational chart, detailed timeline, roles & responsibilities, and meeting agenda are provided in Appendix J.

Timelines and Milestones

Figure 3 provides project milestones and objectives across the five years of the grant. Years 1 and 2 will focus on development of the coaching model, Years 3 and 4 on implementation of the coaching model, and Year 5 on sustainability. Time commitments of project personnel

are appropriate and adequate for completing objectives on time (see Appendix J for detailed timelines and milestones by objective, see Budget Narrative).

Figure 3. Timeline and Milestones

		Y1			Y2			Y3			Y4			Y5		
		W	M	A	W	M	A	W	M	A	W	M	A	W	M	A
OBJECTIVE 1: Explore potential barriers																
OBJECTIVE 2: Identify and pilot implementation supports																
OBJECTIVE 3: Evaluate the effects of a professional development program																
OBJECTIVE 4: Evaluate the effects of the implementation of the Second Step®																

Fiscal Management

Mineola Public Schools, the fiscal agent for the Wood County Cooperative will manage the project budget with contracts to WestEd, OU, TXST, and Second Step®. The Mineola Financial Coordinator reviews and approves all contracts. Once a contract is established, PI [redacted]s – with assistance from Mineola departmental staff – will review all financial and technical reports for accuracy, timeliness, and other aspects related to the scope of work and progress of the project. PI [redacted] will provide final approval of all invoices prior to releasing payment. The Chief Financial Officer at Mineola randomly tests invoices and documentation to assure expenses are reasonable, allocable, verifiable, and allowable and that subrecipients adhere to reporting and invoicing requirements. Fiscal management procedures of the project will follow the standard procedures within each respective organization and comply with all federal mandates for cost accounting systems. The PI from each partner institution will be responsible for the expenditures for their respective portions of the project. Approval structures for expenditures, includes (a) PI approval, and (b) business manager approval. Financial coordinators will attend one PI meeting per month to monitor budgets across the project, address questions, and discuss issues related to fiduciary responsibilities.

Project Evaluation

WestEd will conduct a rigorous independent evaluation of Second Step® to Enhance Rural Students' Achievement and Wellbeing that will meet the What Works Clearinghouse Evidence Standards with Reservations (version 5.0). The WestEd team will be led by [redacted], a leading expert in evaluation of social, emotional, and behavioral interventions. [redacted] is currently the project director of an evaluation of an EIR Expansion project, lead methodologist of a Mid-phase, and co-PD of an Early-phase project. This evaluation will include a rigorously designed impact study to answer confirmatory research questions, as well as a series of moderation and mediation analyses to explore differential effects based on hypothesized student and study characteristics, including fidelity of implementation (FOI). During the development phase, WestEd will lead a formative study with school staff and students to gain in-depth guidance about the implementation process and provide on-going feedback across the development and pilot study phases.

The evaluation is designed to address evaluation questions that prioritize the Standards for Excellence in Education Research (SEER) (Institute of Education Sciences, n.d.). The evaluation will include studies of (1) the impact of Second Step® on confirmatory outcomes, using a design that meets What Works Clearinghouse (WWC) 5.0 Standards With Reservations, preregistered in the Registry of Efficacy and Effectiveness Studies (REES) (SEER1); (2) fidelity of implementation (FOI) (SEER3 and SEER4); (3) process studies with feedback to inform the implementation team about FOI and factors that facilitate or impede program development, scaling, and potential replication (SEER8); and (4) a cost analysis and cost effectiveness study (SEER5) using the ingredients method (Levin et al., 2018) to support sustainability and to understand how resources may be directed to achieve maximum benefit.

Table 2. Evaluation Questions and Data Sources

Evaluation Question	Data Sources
Implementation Question	
What are the effects of a professional development program (including ongoing coaching and feedback) on the fidelity of implementation of the Second Step® Elementary social-emotional learning curriculum by teachers working in high-needs rural schools?	Teacher logs, program records, classroom observations
Confirmatory Impact Question	
What are the effects of the implementation of the Second Step® Elementary social-emotional learning curriculum on high-need rural students' (a) academic achievement in reading and mathematics, (b) school attendance (b) social emotional competency, (c) classroom behavior (i.e., on-task behavior and disruptive behavior) (e) perceptions of school climate (d) disciplinary exclusions, including office discipline referrals and suspensions	• School records • Devereux Student Strengths Assessment (LeBuffe & Shapiro, 2014) • Behavioral Observation of Students in Schools (BOSS) (Shapiro & Kratochwill, 2000) • Georgia Student Health Survey: Elementary Survey (GSHS) (Georgia Department of Education, 2022)
Exploratory Impact Questions	
Mediators Does FOI, teacher knowledge and efficacy for teaching social-emotional learning mediate the impact of Second Step® on confirmatory outcomes?	• Teacher logs, program records, classroom observations • Social-Emotional Competence Teacher Rating Scale (Smetana, 2020). • Teacher Sense of Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001).
Moderators Is there a differential impact of Second Step® on outcomes listed above, depending on a student's race/ethnicity, gender, disability status and specific disability, English Learner status, free/reduced-price lunch status, and teacher characteristics, such as years of experience?	Student and teacher demographic data

(1) The evaluation will meet the What Works Clearinghouse standards with reservations participating schools, teachers, and students. The pilot study will be implemented in four elementary schools in rural east Texas. Approximately 1,200 students and 80 teachers will be included in the pilot study, 600 students in 40 classrooms using Second Step® and 600 students in

40 classrooms using business-as-usual (BAU) SEL. Each school has ~20 K-5 teachers; 40 will implement Second Step® and 40 will implement BAU SEL instruction. The four schools will be randomly assigned to treatment conditions, but statistical power is too low with only four schools to be considered a cluster-level randomized trial. Therefore, WestEd will use a multilevel propensity score weighting approach to establish baseline equivalence at both the teacher/classroom and student levels. This quasi-experimental design (QED) approach meets WWC Evidence Standards with Reservations (V 5.0). The unit of analysis will be students at level 1, the unit of intervention will be the classroom at level-2, and schools will be included as a fixed-effect in all statistical models. Missing data is likely to occur. WestEd will use the sequential modeling imputation approach (Grund et al., 2021), which uses Markov chain Monte Carlo methods to estimate the parameters of the imputation models and sample imputations for the missing data from the conditional distributions of the variables (Gelman et al., 2014).

Measures. WestEd will collect student and teacher data aligned with the logic model to measure the direct and distal effects of Second Step® for students in rural schools.

***School records*.** WestEd will establish a data sharing agreement with each district and collect key indicators of students' behavioral and academic performance and all available student demographic characteristics each year. Specifically, WestEd will collect student gender, race/ethnicity, English learner status, special education status and category, and socio-economic status, as well as attendance, office discipline referrals (ODR), in- and out-of-school suspensions, referrals for special education, educational placement, and all available achievement data, including formative assessment data as available and results on the State of Texas Assessments of Academic Readiness (STAAR®) for students in grade 3 through 5. These data will be included in the propensity score model and, as described above, impact measures.

Increased student social-emotional competency. Students' social emotional competence will be measured using a standardized instrument completed by each students' teacher and direct observations collected using a standardized protocol by external data collectors. Teachers will complete the Devereux Student Strengths Assessment (DESSA) (LeBuffe & Shapiro, 2014). The DESSA is a 36-item, standardized, norm-referenced behavior rating scale that assesses social–emotional competencies that serve as protective factors for children in K through the 8th grade and measures SEL skills, including skills for learning (9 items, $\alpha = .95$), empathy (9 items, $\alpha = .95$), emotion management (9 items, $\alpha = .91$), problem solving (9 items, $\alpha = .94$), and also provides a social–emotional composite score (36 items, $\alpha = .98$) (Low et al., 2015). Teachers will complete the DESSA at the beginning (pre) and again at the end (post) of each school year for all their students.

Independent data collectors will use the Behavioral Observation of Students in Schools (BOSS) (Shapiro & Kratochwill, 2000) to observe students in all classrooms. The BOSS is a direct observation measure with evidence of acceptable interobserver agreement (IOA) and concurrent and predictive validity with related measures (Volpe et al., 2005). Data collectors will collect two behavioral coding categories: on-task behavior (i.e., engagement with instruction) and disruptive behavior. Direct observations will be conducted in all classrooms in both treatment and BAU conditions during core academic instruction time in the fall, winter, and spring. Following procedures used in similar research (Low et al., 2015), each student will be observed for 2 min, divided into 10-s intervals. To obtain class-wide estimates of on-task behavior, observers begin with an identified student in the front or back of the classroom and systematically move to the next student to the left after each interval. After the observers have made their way through all students in the class, they repeat the same process until the observation time elapsed.

This approach will allow for the calculation of class-wide and individual student estimates of classroom behaviors.

Increase school climate. Students' perceptions of school climate will provide insight about broad classroom- and school-wide impacts on the culture and climate. Students in grades 3-5 will complete the Georgia Student Health Survey: Elementary Survey (GSHS) (Georgia Department of Education, 2022)**.** The GSHS is an 11-item measure of school climate that can be completed electronically or paper-pencil. The GSHS was developed by the Georgia Department of Education to measure elementary-aged student perceptions of school climate. The 11 items are rated on a 4-point Likert-type scale from Never to Always and include items such as "I feel safe at school," "My school wants me to do well," and "Teachers treat me with respect". The measure provides a total score to represent overall school climate, as well as subscales to assess safety, bullying, and teacher-student relationships. Prior research has established evidence of both reliability ($\alpha > .80$) and construct validity for the GSHS (Ellis et al., 2022) (LaSalle et al., 2016).

Increased teacher knowledge and efficacy. Teachers' SEL knowledge and self-efficacy will be measured using the Social-Emotional Competence Teacher Rating Scale (SECTRS) (Smetana, 2020). The SECTRS is a 45-items instrument measuring teachers' knowledge of the SEL competencies, providing subtest scores aligned with CASEL. Smetana (Smetana, 2020)examined the reliability for each subscale, finding acceptable internal consistency for each: Self-Awareness ($\alpha = .77$), Self-Management ($\alpha = .88$), Social Awareness ($\alpha = .89$), Relationship Skills ($\alpha = .80$), and Decision Making ($\alpha = .75$). Teachers will also complete the short form Teacher Sense of Self-Efficacy Scale (Tschannen-Moran & Hoy, 2001). The scale is composed of 12 items assessing teacher perceptions of instructional strategies, classroom management, and stu-

dent engagement. Authors found acceptable reliability coefficients across subscales: student engagement (α= .81), instructional strategies (α= .86) and management (α = .86).

Fidelity of implementation. Teachers using Second Step® will complete weekly implementation logs to record dosage and adherence to the program. First, WestEd will track how many times a week and for how long each teacher implements Second Step® using the log. Additionally, the logs will measure adherence to the key lesson components and adaptations/modifications (e.g., "To what extent did you leave out parts of the lesson"). WestEd will collect reliability data for teachers during direct observation sessions and compare the independent observations of dosage, adherence, and adaptation to teacher self-report. Finally, WestEd will use the digital analytics from the Second Step® software to explore how students and teachers are using the program.

Impact Analysis. WestEd will use a multilevel modeling approach to estimate the impacts of Second Step® on student outcomes. The primary impact models using DESSA-SSE scores, attendance, ODR, suspensions, and academic achievement will be estimated as follows:

$$y_{ij} = \beta_0 + \beta_1 condition_j + \sum_{q=1}^{4} \lambda_q SCH_{jkq} + \sum_{r=1}^{R} \gamma_r Z_{ijr} + \xi_j + \varepsilon_{ij}$$

where y_{ij} is the student *i* outcome in teacher *j;* $condition_j$ is set to 1 for Second Step® and 0 for BAU; SCH_{jkq} are four dummy variables used to indicate schools; Z_{ijr} are student-level covariates, ξ_j is a teacher random effect, and ε_{ij} is a student random effect. Impacts will be assessed using the estimate of β_1. The final models will be based on the scaling of the dependent variable (e.g., Poisson models for county variables, such as suspensions).

Power. We used PowerUpR (Bulus et al., 2021) to estimate the minimum detectable effect size (MDES) for the impact analysis. We assumed 80 teachers (20 in each school) and an average of 15 student per classroom (1,200 students), an ICC of .15 (Hedges & Hedberg, 2007), and a .65

level-1 proportion of variance and a .30 level 2 proportion of variance explained by using demographics and pre-test data. Based on these specifications, the MDES is 0.206. If we assume the ICC is less than .10, which is likely more realistic, the MDES is 0.168. If we experience 20% attrition, the MDES for ICC of .15 is 0.231 and 0.189 for ICC of .10.

(2) The extent to which the evaluation will provide performance feedback and permit periodic assessment of progress.

Frequent actionable guidance is critical for the development and adjustment of Second Step® in rural schools to ensure success. The WestEd evaluation team will be a partner on the project from the beginning, attending monthly meetings and discussing frequent barriers and challenges to implementation and outcome impacts. Several approaches will be used to provide consistent performance feedback. First, WestEd staff will analyze FOI logs quarterly and provide visualizations and narrative reports to the project team quarterly. This will ensure that teachers not implementing at acceptable levels are identified early for additional support.

Second, WestEd will conduct annual qualitative focus group interviews with teachers, school administrators, and project staff. These focus group interviews will focus on perceptions of the implementation process, perceived successes and challenges, and solutions to those challenges. The focus group interviews will be facilitated by trained WestEd staff and recorded for analysis. Finally, the WestEd team will collect and analyze teacher and student outcome data annually and report the findings to the research team prior to the beginning of the school year. This will ensure evaluation of progress towards outcomes is frequent, consistent, and actionable to make implementation adjustments during the project. For example, if FOI is low, targeted training can be conducted with those teachers to increase fidelity. This iterative approach will be ongoing and increase overall FOI.

(3) Clearly articulates the key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation

FOI is a key measure collected throughout the entire project using the teacher logs. These logs include measures of dosage, adherence, and adaptation. Each of these constructs will be aggregated using different approaches. First, we will use descriptive statistics and calculate fidelity for each week, defined as 90% or greater dosage and adherence. Next, WestEd will use fidelity logs to create latent profiles of teachers based on their implementation of Second Step®. These models will create FOI subgroups for descriptive and analytic analyses. Finally, WestEd will aggregate logs and use them as a moderator of treatment effects. These models will be contingent upon measurement of (the lack of) Second Step® implementation in comparison condition classrooms. The external observers will also collect FOI log data during observations.

WestEd will extend the impact models described above by adding an interaction term between the treatment condition and proposed moderator analyses, including student and teacher demographic characteristics, including race/ethnicity, gender, EL status, and special education status. WestEd will conduct mediation analyses using multilevel structural equation modeling (ML-SEM). Specifically, models will be estimated to evaluate the mediating role of FOI, teachers' knowledge, and teacher self-efficacy on the direct effect of treatment on student outcomes. These models will determine if teacher knowledge or efficacy is a requisite precondition for achieving programmatic success, defined as improved student outcomes.