Motivational Interviewing Skills for Coaches (R324A190173)
Research Performance Progress Report: Year 4

I. Accomplishments

What are the major goals for year 4 (originally Year 3 goals)

1 Conduct PDSA cycle 4
- 1.1 Recruit 40 instructional coaches, 80 teachers, and 80 students to participate.
- 1.2 Implement RCT

As described in our Year 2 and Year 3 annual reports, the COVID-19 pandemic has delayed implementation in each of the past 3 years. Although we modified our design to reduce demands on already overburdened teachers and parents (i.e., simplified our teacher recruitment and selection procedures, did not screen, or consent parents or collect student outcome) we were able to accomplish all our Year 2 goals by December of Year 3. Also described in our Year 3 annual report, while we started our RCT in December 2021 by actively recruiting coaches, however, in early January 2021, due to COVID-19 Omicron complications and an already short implementation schedule it was deemed that continuing with Cycle 4, while feasible, was highly risky in Bullitt County due to potential participant illnesses/absences and withdraws, and the looming threat of NTI instruction that would result in poor outcomes or missing data for the project. As a result of these setbacks, we planned to conduct the entire RCT in Bullitt County and Fayette County Public Schools (FCPS; Lexington, KY) during project Year 4 (2022-2023 school year). Despite having already stated recruiting in December 2021 and securing Board of Education approval in Bullitt County, they withdrew their support in summer 2022. FCPS remained eager to participate; because of the size of the district, strong administrative support, and many potential instructional coach participants, we remained hopeful we could reach out recruitment targets by implementing two waves- Wave 1 in the fall 2022 and Wave 2 in spring 2023. Except for only reaching 50% of our target enrollment, our RCT implementation efforts have been successful. The remainder of this report presents (a) preliminary results for Cycle 4, and (b) a plan for conducting a Cohort 2 to successfully accomplish all of project goals during a 5th year of implementation, if IES will grant us a NCE.

Cycle 4: Cohort 1 (Waves 1 & 2)

Participants

Coach Demographics. During cycle 4, 21 school-based personnel (henceforth referred to as coaches) were consented and randomized to participate in the RCT across two waves. Eleven coaches were randomized to the CBP+MI condition and 10 were randomized to the CBP-only condition. During wave 1, two coaches dropped prior to training, reducing the sample of participating coaches to 19 coaches (CBP+MI = 10, CBP-only = 9). The following demographic information is for the 19 participating coaches. The 19 coaches worked in 17 different schools within FCPS. Eleven of the 19 coaches (57.9%) worked in elementary schools and 6 (31.6%) worked in middle schools. They served in a variety of roles within their respective schools. Three were mental health specialists, three were professional growth and effectiveness system

(PGES) coaches, two were school counselors, two were social workers, and one was a school psychologist. One was a PBIS coach and another was in a school leadership support role. The remaining six participating coaches served in administrative roles within their schools (e.g., principal, assistant principal, administrative dean).

Teacher Demographics. For 18 of 19 coaches, two teachers were recruited to participate in the study; though one teacher dropped out of the study during wave 2 citing that she did not have time to participate. For one coach, we were only able to recruit one teacher. Thus, to date, 36 teachers have participated across the two waves (20 working with coaches randomized to CBP+MI and 18 working with coaches randomized to CBP-only). For wave 2, we are still collecting baseline data from some teachers. Thus, the following demographic information is for 32 of 36 participating teachers. Twenty-nine participants (91%) were general education teachers, one was a special education teacher (3%), and the remaining two teachers reported their primary teacher role as 'other.' On average, teachers had been teaching for 5.1 years (*SD* = 6.4), teaching at their current school 2.5 years (*SD* = 3.5), and teaching students receiving special education for 4.7 years (*SD* = 6.2). Nineteen teachers (59%) held a bachelor's degree, 11 (34%) held a master's degree, and one (3%) held a doctorate. One teacher did not report their level of education. Seventy-two percent of teachers were female. Sixteen percent reported their race as Black, 72% reported their race as White, and 9% reported more than one race. There were no statistically significant differences between teachers in the CBP+MI and CBP-only conditions.

Student Demographics. Participating students, on average, were 10 years old at baseline (SD = 2.0; range = 6 – 13 years old). The majority (91%) used English as their primary language. Forty-seven percent were eligible for free or reduced-price lunch. Based on teacher report, 32% of participating students were on an IEP. IEP eligibility categories for these students included specific learning disability, other health impairment, ASD, emotional disturbance, and speech. Sixty-nine percent of participating students were male. Based on teacher report, 9% of students were Latino. Based on teacher report, 59% of students were White, 25% were Black, 3% were American Indian or Alaska Native, and 3% were Asian. For the remaining 10%, race was not reported.

Coach Training

All participating coaches from both conditions attended the CBP session, which lasted 120 minutes. Facilitator prep time for the CBP sessions was 540 minutes. One facilitator reported preparing for 180 minutes and the other facilitator reported preparing for 360 minutes. All but one coach randomized to the CBP+MI condition attended the three MI sessions. The first session was 90 minutes. The second and third sessions were 210 minutes each. Thus, in total coaches received 510 minutes (i.e., 8.5 hours) of workshop-based MI training. The coach who did not attend all three group sessions, attended the first group session (90 minutes) and then participated in two 90-minute MI training sessions with the lead MI trainer on the project. This coach received a total of 270 minutes (i.e., 4.5 hours) of MI training. Facilitator prep time for the MI training sessions was 300 minutes total, an average of 60 minutes of prep time per session. All coaches also participated in two standardized practice sessions. The lead MI trainer on the project conducted the simulated practice sessions with coaches who were randomized to the CBP+MI group. The lead CBP trainer on the project conducted the practice sessions with coaches randomized to the CBP-only condition. Average prep time reported by coaches was 16

minutes for the CBP-only simulated practice sessions and 18 minutes for the CBP+MI simulated practice sessions. On average, CBP-only sessions lasted 21.3 minutes, whereas CBP+MI sessions were, on average, 40 minutes long.

Facilitators completed a brief engagement survey for each participant who attended the CBP, MI, or simulated practice sessions. The 6-item survey assessed the extent to which participants were attentive, engaged, responsive to feedback, and motivated to participate. Items were rated on a 5-point Likert scale. Mean item ratings were high across all trainings. Mean item ratings for the CBP training were 4.81 (*SD* = 0.28). For the MI training, mean item ratings were 4.58 (*SD* = .35). Finally, for the simulated practice sessions, mean item ratings were 4.67 (*SD* = 0.56).

Table 1 below summarizes feedback on the acceptability, appropriateness, and feasibility of the CBP training, MI training, and standardized practice sessions. Upon completion of all training components, we collected data from coaches on the acceptability, appropriateness, and feasibility of coach support (Weiner et al., 2017). Each item was rated on a 5-point Likert scale with higher scores indicating higher levels of acceptability, appropriateness, or feasibility. On average, scores were high across the type of training and the group, indicating that, in general, participating coaches in both conditions found their respective trainings to be acceptable, appropriate, and feasible.

Table 1. Acceptability, appropriateness, and feasibility scores by session and condition.

	CBP + MI group			CBP-only group	
	CBP *M(SD)*	MI *M(SD)*	SP *M(SD)*	CBP *M(SD)*	SP *M(SD)*
Acceptability	4.58 (0.96)	4.88 (0.21)	4.93 (0.17)	4.81 (0.33)	4.94 (0.18)
Appropriateness	4.35 (1.02)	4.75 (0.37)	4.83 (0.38)	4.69 (0.37)	4.78 (0.41)
Feasibility	4.80 (0.33)	4.80 (0.16)	4.88 (0.32)	4.81 (0.33)	4.78 (0.41)

CBP = Coaching Best Practice training; MI = MI training; SP = standardized practice sessions with feedback

Training Focus Groups

One focus group was conducted with five coaches who provided feedback on the CBP workshop training and individualized feedback components, as members of the control group. Coaches described the training as helping them learn what to look for in teacher practices as well as the data to support it. The training was also reported to have included application and practice opportunities to model OTRs, useful statistics on OTRs, and an environment that made the process feel less intimidating. Time was given to practice, there was an appropriate use of breaks during the training, and having multiple instructors made the training more engaging.

In relation to the multi-step coaching procedure, coaches reported that they received all of the information that they needed from this process and that the process would be beneficial to anyone giving teachers feedback on their teaching practice.

For the individualized feedback, they reported that the process was very feasible, but that they would like the timeline laid out in advance. They reported that this process helped them to

understand how to talk through the data, gave specific feedback about how to explain terminology to teachers, and that the facilitator was very experienced about what the conversations should look like, making the individual feedback very helpful.

Regarding fully adopting the system at their current school, they reported that it might be too early to tell, but that it might be valuable in helping to implement small feasible changes and words in teachers' practices.

MI & CBP Coach Interviews

An individual interview was held with two coaches who provided feedback on the MI and CBP training processes. For the CBP portion of the workshop, it was reported that the trainers were great, provided lots of personal experience and prior knowledge, and incorporated lots of interaction. The content provided was useful and a good refresher. It was also helpful being in a small group and talking with peers from other buildings about how they perceived the content. However, it could be difficult, at times, to stay engaged due to competing work demands.

For the multi-step coaching procedure, the role plays were super helpful as well as watching others. However, it could be difficult to keep track of the expectations for each session (e.g., what is supposed to happen in Session 2 vs. Session 3).

For the MI skills portion of the workshop, coaches reported that the soft skills of coaching content was very helpful and made them more self-aware and more compassionate listeners. Additionally, being with a small group and talking with others kept the process engaging. However, it may have been helpful to be more spread out, rather than having three back-to-back days of training (i.e., perhaps one shorter session per week) so that the training was not as overwhelming. Coaches reported that while the MI skills were new, they made sense intuitively, and helped them to avoid going into problem-solving mode. Instead, they learned to and empower teachers to solve their own problems. They report that this skillset would be helpful in talking with teachers, parents, and students.

Regarding the individualized feedback, coaches reported that the facilitator made himself available and was very flexible. It also helped that they were able to ask the specific questions about what to say in certain situations and have immediate feedback—this made it more beneficial, in some instances, than the role-playing exercises.

Coaches reported that, if supported by the data, the program would be very beneficial in their school once buy-in is obtained. They also report that additional supports are needed, such as resources to keep them fresh in using the skills.

Coaching Self-Efficacy

Prior to training, coaches from both conditions completed an adapted and abbreviated version of Guiney et al.'s (2014) Consultation Self-Efficacy Scale (CSES). The scale incorporated 16 of 19 items that Guiney and Zibulsky (2017) identified in their CSES process scale and includes five additional items from the original CSES scale (items 11, 12, 13, 32, and 33). In most cases, minor wording changes were made (e.g., changing consultation to coaching or consultee to teacher). Like the original, this 21-item version asked respondents to report the extent to which

they were confident with each statement on a 9-point scale ranging from 1 (Not at all confident) to 9 (Extremely confident). Baseline coach self-efficacy scores ranged from 85 to 183. The mean score was 135.9 (*SD* = 23.1). Self-efficacy scores were comparable for participants in the CBP+MI condition (*M[SD]* = 136.4[17.7]) and the CBP-only condition (*M[SD]* = 135.4[29.1]). These data were be collected again at post-intervention to examine improvements in coach self-efficacy; however, at this time, post-intervention data are not available.

Within-Session Coaching Data

Teachers in both conditions complete up to four coaching sessions with a coach randomized to either the CBP-only or CBP+MI condition. Implementation is on-going across both waves currently. In turn, we will report on available data. On average, coaches reported spending 22.6 (*SD* = 17.1) minutes preparing for the first coaching session (range = 0 – 60 minutes). Average session 2 and 3 prep times were 16.5 minutes (*SD* = 12.3) and 15.6 minutes (*SD* = 9.4). On average, coach prep time for session 4 was 12.5 minutes (*SD* = 5.0). The average length of the first coaching session was 19.8 minutes (*SD* = 6.2). The average length of sessions 2 and 3 were similar, though slightly more variable. Session length, on average, for sessions 2 and 3 were 19.7 minutes (*SD* = 9.1) and 19.4 minutes (*SD* = 10.2), respectively. Session 4 coaching sessions were 16.3 minutes (*SD* = 7.5) in length, on average.

Coach-reported, session-level data. Upon completion of each session, coaches reported on (a) teacher engagement and (b) their own preparedness for, and satisfaction with, the session. The coach-reported measure of teacher engagement was based on a six-item Likert scale. For each teacher and each session, we calculated a mean score across the six items. For both measures, higher scores indicated higher levels of engagement. Self-reported coach satisfaction and preparedness were single-item rated on a 5-point scale with higher scores indicating higher levels of satisfaction and preparedness (Magill, 2010). Table 2 below summarizes means scores on the coach-reported data by session.

Table 2. Coach-reported satisfaction, preparedness, and teacher engagement.

	Coach satisfaction *M(SD)*	Coach prepared *M(SD)*	Teacher engagement *M(SD)*
Session			
1. Engagement	4.6 (0.5)	4.6 (0.5)	4.4 (0.4)
2. Assessment	3.9 (0.7)	4.4 (0.7)	4.4 (0.6)
3. Feedback	4.4 (0.7)	4.5 (0.5)	4.6 (0.4)
4. Planning	4.8 (0.5)	4.8 (0.5)	4.9 (0.1)

We also assessed session difficulty and the coach's cognitive load during delivery of each coaching session. We collected a 12-item measure of cognitive load adapted from Brondfield et al.'s (2021) Consult Cognitive Load measure. The measure consists of 12 items rated on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Minor wording changes were made to 6 of the 12 items (1, 2, 6, 8, 11, and 12) to account for changes in setting from medical consultation to school-based coaching. Four items (5, 7, 9, 10) were unchanged. Two items (3 and 4) were re-written because the original items were not applicable to school-

based coaching. Our revisions to these items focused on capturing intrinsic load associated with the use (and understanding) of communication within sessions. In addition, we collected a single item asking the coach to indicate on a 5-point scale how difficult the session was relative to other coaching sessions they have completed. Finally, we collected the single-item Paas scale (Paas et al., 2008), which assesses the amount of mental effort invested during the session. The Paas scale is a 9-point scale ranging from 1 (Very, very low mental effort) to 9 (Very, very high mental effort). Table 3 below summarizes these data by session.

Table 3. Coach-reported difficulty, mental effort, and cognitive load by coaching session.

			Cognitive Load		
	Difficult session *M(SD)*	Mental Effort *M(SD)*	Intrinsic load *M(SD)*	Extrinsic load *M(SD)*	Germane load *M(SD)*
Session					
1. Engagement	2.1 (0.8)	5.7 (1.5)	6.6 (2.1)	6.4 (2.3)	11.3 (1.0)
2. Assessment	2.6 (1.0)	5.6 (1.5)	7.1 (1.8)	7.4 (2.1)	10.9 (1.4)
3. Feedback	2.5 (1.1)	5.5 (2.1)	7.3 (2.5)	6.6 (2.0)	11.3 (0.7)
4. Planning	2.5 (1.3)	4.0 (2.3)	6.0 (2.3)	5.0 (2.0)	11.5 (0.6)

Teacher-reported, session-level data. Teachers reported on (a) the amount of time they spent preparing for the session as well as their (b) satisfaction, (c) engagement, and (d) alliance with their coach upon completion of each session. Teacher-reported prep time for session 1 was, on average, 15.2 minutes (*SD* = 14.2). Average teacher-reported prep time for sessions 2 through 4 were 12.3 minutes (*SD* = 9.4), 14.5 minutes (*SD* = 11.1), and 13.6 minutes (*SD* = 12.8), respectively.

Teacher-reported satisfaction and engagement items were scaled and worded similarly to the coach-reported measures described above. To assess teacher-reported alliance with their coach, they completed an 8-item alliance measure. The items were rated on a 4-point scale with higher scores indicating higher levels of alliance. We computed a mean total score across the eight items to assess overall alliance during the session. Teacher-reported mean satisfaction, engagement, and alliance scores by session are reported in Table 4 below.

Table 4. Teacher-reported satisfaction, engagement, and alliance by coaching session.

	Teacher self-reported satisfaction *M(SD)*	Teacher self-reported engagement *M(SD)*	Teacher-reported alliance with the coach *M(SD)*
Session			
1. Engagement	4.7 (0.6)	4.7 (0.5)	3.8 (0.2)
2. Assessment	4.8 (0.5)	4.6 (0.5)	3.9 (0.1)
3. Feedback	4.6 (0.5)	4.7 (0.5)	3.9 (0.2)
4. Planning	4.9 (0.4)	4.9 (0.4)	3.8 (0.2)

Fidelity

While we assessed MI fidelity using the Motivational Interviewing Treatment Integrity Code (MITI 4.2; Moyers et al., 2015; Moyers et al., 2005) with our research team leading the coding effort for Cycles 2 and 3, we will have fidelity data from Cycle 4 coded by Maggie Sibley and her coding team once all of the data has been collected. Thus, at this time, these data are not available.

Proximal Outcomes

At baseline and post, participating teachers complete the following measures: (1) the Teacher Motivation Inventory, (2) the Teacher Sense of Efficacy scale, (3) the Student-Teacher Relationship scale, (4) Maslach's Burnout Inventory, and (5) the Teacher Attitude Toward Inclusion Scale. Additionally, teachers were observed three time pre- and post-coaching and their rates of OTR and positive/negative feedback were recorded. To date, we are in the process of collecting post-intervention data for wave 1 participants and baseline data for wave 2 participants. Thus, these data are not available. Table 5 below summarizes baseline equivalence on teacher-reported outcomes. The two intervention conditions are equivalent across outcomes.

Table 5. Baseline equivalence on teacher outcome measures.

	CBP-Only *M(SD)*	CBP+MI *M(SD)*	Test statistic	*p-value*
Teacher Motivation Inventory	45.6 (4.1)	47.6 (6.6)	-0.96	.343
Teacher Sense of Efficacy				
Efficacy of Student Engagement	53.1 (7.3)	53.4 (7.7)	-0.13	.895
Efficacy of Instructional Practice	54.2 (8.1)	53.8 (8.5)	0.12	.902
Efficacy of Classroom Management	55.1 (10.3)	55.0 (8.8)	0.02	.982
Maslach Burnout Inventory				
Emotional Exhaustion	28.1 (9.8)	27.9 (10.9)	0.04	.972
Personal Accomplishment	36.5 (5.1)	37.8 (4.4)	-0.78	.444
Depersonalization	4.9 (3.3)	5.9 (5.8)	-0.58	.570
Teacher Attitude Toward Inclusion				
Perceptions of Students	22.5 (6.5)	19.0 (7.0)	1.39	.177
Beliefs about the Efficacy of Inclusion	13.2 (4.6)	10.5 (3.8)	1.80	.083
Perceptions of Professional Roles	9.8 (4.2)	9.1 (4.0)	0.43	.667
Student-Teacher Relationship Scale				
Closeness	33.7 (8.5)	34.7 (6.8)	-0.38	.710
Conflict	31.7 (10.2)	35.6 (8.0)	-1.20	.240

Teachers' Post-Intervention Satisfaction

After completion of the intervention, we will collect data from each teacher on the acceptability, appropriateness, and feasibility of coach support (Weiner et al., 2017). Each item will be rated on a 5-point Likert scale with higher scores indicating higher levels of acceptability, feasibility, or appropriateness. We also will collect the 12-item Client Evaluation of Motivational Interviewing (CEMI; Madson et al., 2013; Madson et al., 2016) measure. The CEMI rates the degree to which the coach exhibited specific MI-related behaviors. Items are rated on a 4-point scale (1 = *Not at all* to 4 = *A great deal*), with higher scores indicating more MI consistent behavior on the part of the coach. We are in the process of collecting these data for wave 1 and have not begun post data collection for wave 2. In turn, these data are not currently available.

Cost Evaluation Plan

As reported above, we are collecting time estimates from facilitators, coaches, and teachers to help inform our cost evaluation. Below is a brief description of our economic analysis plan. The purpose of our economic analysis is twofold. First, we are examining the cost-effectiveness of our MI training model (CEA 1). Second, we are examining the cost-effectiveness of the Standard CBP training condition versus Standard CBP + MI training condition (CEA 2). Table 6 below summarizes the purpose, comparator, and outcomes for each of the proposed CEAs. First, we are evaluating the cost-effectiveness of the MI training, replicating – for sake of comparability – the procedures used by Olmstead, Carroll, & Martino (2011). The purpose of this CEA will be to compare the MI training component to Olmstead et al.'s (2011) "expert led" MI training model. We will use the number of coaches meeting MI performance standards during the coach's first session (Values discovery with 1st teacher) and last feedback session in their conversations with teachers as the outcome variable for this CEA. Second, we are evaluating the cost-effectiveness of the Standard CBP training versus the *Standard CBP* + MI training condition. For this analysis, costs are including training costs and CBP coaching implementation procedures; further, we are using teacher use of OTRs and Positive Feedback and student challenging behavior and academic engagement as outcome variables. To examine costs for both of these components, we will use the ingredients methods (Levin & McEwen, 2001), which necessitates identifying key intervention ingredients or resources (e.g., labor, supplies), quantities needed, and unit prices. The data for these analyses will be collected during our RCT (2021-2022 and 2022-2023 school years; Cycle 3). The procedures for determining cost are provided in the next section.

Table 6. Planned cost-effectiveness analyses.

	Purpose	Comparator	Outcomes
CEA 1	Examine the cost-effectiveness of the MI training component (MI training costs - Standard CBP training costs)	Olmstead et al.'s (2011) "expert-led" training group	Number of coaches meeting MI performance standards during actual sessions (1st values discovery and final feedback)
CEA 2	Examine the cost-effectiveness of the CBP training + MI training condition	Standard CBP training condition	Increases in teachers' use of OTRs and Positive Feedback; Reductions in students' challenging behavior; increases in

	students' academic engagement

Cycle 4, Cohort 2

Despite our best efforts to meet our recruitment targets, initially scheduled for Y3 and then scheduled for Y4, we have fallen short. We are confident we have enough funds remaining to complete our RCT in Fall 2023 if granted a NCE. Below, we describe two changes that will be important to navigate to successfully complete this development and innovation grant: (a) our decision to move our implementation effort from Kentucky to Missouri and (b) the impact of hiring a new our program manager in the middle of our RCT.

Implementation in Missouri

As noted in our previous reports, recruiting participating districts and coaches in Kentucky schools has been a challenge since the project's inception. In July 2022, Dr. Frey transitioned to the school of social work at the University of Missouri and is affiliated faculty in the Missouri Prevention Science Institute (MPSI). MPSI includes Methodology and Measurement branches that support rigorous research and evaluation projects. The MPSI has grown to over 30 faculty members from a dozen disciplines (e.g., school psychology, special education, counseling psychology, social work, educational leadership, statistics, measurement, and evaluation). In 2020, MPSI funded 80 faculty, students, and staff. Since 2010, the MPSI has received over $50 million in funding including $40 million in federal research grants from IES, the NIJ, and the National Institute of Mental Health. The transition to Missouri-based implementation is promising for several reasons. First, MPSI has existing staff trained to conduct the observations of teacher and child behavior that are needed to complete our RCT; as well as an existing management infrastructure of the observers that can be leveraged. Thus, new staff will not need to be trained or infrastructure created. Additionally, because Dr. Frey resides in Missouri, it will be easier for him to lead, or support depending on the credentials and experience of a new research manager. Further, we have secured tentative agreement from Jefferson City Public Schools (JCPS) to participate. JCPS is 30 miles south of Columbia, and multiple MPSI research efforts are in place in the district. JCPS has informed us they have 21 potential coaches to participant.

New research manager

Blake Skidmore has served as the research manager for this project since its inception. Mr. Skidmore has supported Dr. Frey with recruitment and as the point person for project staff. He also assists with the IRB; coordinates the consent (coaches, teachers, and parents) process; leads the MI workshop, standardized practice training, and PLCs for the CBP + MI condition; provides MI training for the control group and schedules the focus group interviews.

Although initially budgeted 1.0 FTE during Y2 and Y3, we were able to save the money allocated to his position by placing him on other funded projects. Anticipating we would not be able to keep him on as a full-time employee into the NCE, we have also been preparing for his departure since summer 2022. In April 2022, Blake's FTE will be reduced from .90 on this project to .40, and in May and June, his final month on this effort, he will be at .15 FTE. While

this leaves our team with a significant gap, there are two factors playing out in our favor. The first is that Blake's departure occurs at a point in the process where there are naturally fewer demands on a research manager, as we will be concluding our work with the current cohort. Second, we have been preparing for his departure for several months and it does present a few opportunities that would not have otherwise been available. Lastly, effort to cross train members of the team on aspects of Blake's role have been intentional. Namely, Andy, who is already well versed in leading the training, has been actively involved in training with the last two cohorts. In addition, a part-time data managers (Kiersten Bills and Jeanie Ford) have worked closely with Blake to coordinate and monitor data collection procedures; these data managers will remain involved in the Missouri implementation effort and bring a depth of familiarity that will benefit a new research manager. We are confident that Andy, a new research manager, MPSI staff (hourly observers), and the rest of the team who supported Cohort 1 implementation will be successful.

What opportunities for training and professional development has the project provided?
In Fall/Winter 2022, we provided the full MI workshops and the simulated practice with MI feedback for 10 FCPS instructional support personnel and the CBP training for an additional 10. Additionally, On April 28th and May 1, 2023 we will provide the MI workshops to the 10 coaches who were randomized to the CBP only condition, several members of Dr. Scott's research team, and any FCPS staff that are interested.

Have the results been disseminated to communities of interest?
We presented an invited presentation for the APBS in April 2022 in San Diego, CA. The title of the presentation was "School-based Motivational interviewing: Past, present, and future: A brief history and overview of school-based applications of motivational interviewing".

What do you plan to do during the next reporting period to accomplish project goals?
In April 2023 we will request a NCE to complete the project. If granted, we will complete a single wave of implementation with JCPS in fall 2023. If recruitment in JCPS exceeds 17 coaches, we will divide them into two waves. Additionally, if the JCPS recruitment is 17 or less, we will attempt to recruit another district and conduct a 3rd cohort in spring 2024. We will also disseminate our findings via district reports, peer-reviewed publications, and in our final report.

II. Products

See answer to "how have results been disseminated" question above.

III. Participants and Other Collaborating Organizations

What individuals have worked on the project?

Name: Andy Frey
Project role: Co-PI
Nearest month worked: 3
Contribution to the Project: Dr. Frey has responsibility for day-to-day coordination of the study, and shares responsibility with senior investigators for the monitoring of study protocol procedures and ensuring all project objectives are met. Dr. Frey also supervises intervention

staff, leads development efforts of the MITAS for Coaches, and participates in data analysis and writing tasks.

Name: Terry Scott
Project role: Co-PI
Nearest month worked: 1
Contribution to the Project: Dr. Scott oversees staffing and coordination of the teacher and student observations and assists to develop the provision of OTRs and feedback portion of the coach best practice procedures training with instructional personnel. He also assists in preparing data, using the teacher baseline observations, for instructional personnel to use to provide feedback (step 3) during the coaching best practice procedures. Dr. Scott also participates in the dissemination of the study findings.

Name: Blake Skidmore
Project role: Research Manager
Nearest month worked: 11
Contribution to the Project: Mr. Skidmore is a lead trainer and assists with intervention development. He also assists with the development of the data collection protocol and with data collection.

Name: John Seeley
Project role: Co-I
Nearest month worked: 0
Contribution to the Project: Dr. Seeley is our senior methodologist. He participates in weekly team meetings and oversees efforts related to our measurement protocol and the processing and analyzing of project data.

Name: Hill Walker
Project role: Co-I
Nearest month worked: 0
Contribution to the Project: Dr. Walker participates in weekly team meetings and advises our team on matters related to measurement and implementation. He will be instrumental in our dissemination efforts.

Name: Jason Small
Project role: Co-I
Nearest month worked: 3
Contribution to the Project: Mr. Small prepares data collection forms and oversees the data preparation and analysis processes. He serves as the primary liaison between the University of Louisville and the Oregon Research Institute.

Name: Jon Lee
Project role: Consultant
Nearest month worked: 0
Contribution to the Project: Dr. Lee assists our efforts related to motivational interviewing.

Name: Shantel Crosby
Project role: Co-I
Nearest month worked: 1
Contribution to the Project: Dr. Crosby is a faculty member at the Kent School of Social Work at the University of Louisville, and was included to design, facilitate, and analyze our focus group interviews.

Name: Kiersten Bills
Project role: Co-I
Nearest month worked: 2
Contribution to the Project: Ms. Bills is a part-time employee at the University of Louisville. She manages the collection of survey data.

Name: Jeanie Ford
Project role: Co-I
Nearest month worked: 1
Contribution to the Project: Ms. Ford is a part-time employee at the University of Louisville. She conducts the SSBD screeners with manages and disseminates the gift card incentives.

Name: Gwen Berry
Project role: Research Manager
Nearest month worked: 2
Contribution to the Project: Dr. Berry is a research staff at the College of Education and Human Development at the University of Louisville. She trains, manages, and supports participating instructional support personnel assigned to the CBP Only condition.

Name: Marlene Parish
Project role: Research Manager
Nearest month worked: 2
Contribution to the Project: Ms. Parish is a research staff at the College of Education and Human Development at the University of Louisville. She trains, manages the observers and ensures all observation data is collected.

What other organizations have been involved as partners?
Prior to year 4, we worked with Franklin County Public Schools. This year, we have partnered with Fayette County Public School.

Have other collaborators or contracts been involved?
Nothing to report.

IV. Impact

This project is helping the fields of education, psychology, and social work understand the relative effectiveness of motivational interviewing skills in the context of coaching. We are also learning a great deal about the potential of motivational interviewing applied within the context

of school-based interventions, particularly with regard to the supports needed for school personnel to practice this approach with adequate skill levels.

What is the impact on other disciplines?
Coaching is an interdisciplinary activity, and thus the results are relevant to professionals from several disciplines, including social work, psychology, counseling, and educators serving as consultants, resource teachers, or behavior specialists.

What is the impact on the development of human resources?
The training should increase capacity of participating coaches and teachers.

What is the impact on physical, institutional, and information resources that form infrastructure?
Not applicable.

What is the impact on technology transfer?
Not applicable.

What is the impact on society beyond science and technology?
The primary impact is on the improvement of the quality of life for the teachers, students, and parents who have benefited from the services provided through this grant. Positively impacting families early in their children's school careers has potential, long-term positive effects on society given the relationships between early school success and long-term outcomes such as high school graduation and successful employment.

What dollar amount of the award's budget is being spent in foreign countries?
None.

V. Changes/Problems

Only the challenges faced with the COVID-19 health crisis described elsewhere in this report.

Violation of protocol
There have been no protocol deviations; however, we did report a protocol deviation to our IRB. On 11/18/22, the project manager, Blake Skidmore, spoke by phone with a potential participant's caregiver to complete the caregiver consent process, the family's contact information was provided by school staff. Blake was made aware Spanish was the caregiver's primary language but was under the assumption they spoke conversational English. Once on the phone, Blake discovered the caregiver only spoke Spanish. Blake is competent in Spanish and elected to complete the conversation with them in Spanish. The study was described, the rights of participants were described, the low risk to students was discussed, the voluntary and confidential nature of the project were reviewed. They were sent a copy of the consent in English. 2-3 days later a few follow-up question was answered via text message. The caregiver then elected to sign the consent form. Blake reviewed the circumstance with the research team, and we then chose to submit a deviation to the IRB. After speaking with the IRB, we were informed we could not consider this a valid consent process. The team decided to take no further action to consent this family. Given the time constraints on our project, taking the steps to

prepare a valid consent process would be too lengthy. The family and teacher were notified that the family is unable to participate. The process for identifying another family in the classroom was initiated. The Institutional Review Board (IRB) reviewed the Protocol Deviation/Violation report(s) and it is now acknowledged.

Actual or anticipated problems or delays and actions or plans to resolve them.
See above.

Changes that have a significant impact on expenditures.

Only the challenges faced with the COVID-19 health crisis described elsewhere in this report.

Significant changes in the use or care of human subjects, vertebrate animals, and/or biohazards.

None to report.

VI. Special Reporting Requirements
Nothing to report.

VII. Budgetary Information

VII. Budgetary Information

A	B	C	D	E
SF424 Budget Categories	Total grant funds received since beginning of the grant	Total funds **drawn down** since the beginning of the grant through 2/28/2023	Anticipated commitments from 3/1/2023– end of the current grant year	Carryover into the NCE if granted (B - C - D)
Key Personnel	$150,725	$154,288.07	-$3,565.26	$2.19
Other Personnel	$239,746	$180,507.14	$18,308.10	$40,930.76
Fringe	$94,794	$87,988.42	$13,333.33	-$6,527.75
Supplies	$62,834	$27,021.80	$4,000.00	$31,812.20
Consortium	$670,593	$275,791.45	$139,266.67	$255,534.88
Tuition				$0.00
Travel	$20,476	$9,920.40	$5,685.00	$4,870.60
Indirect	$156,929	$130,039.16	$9,817.91	$17,071.93
TOTAL	$1,396,097	$865,556.44	$186,845.75	$343,694.81

Table 7. Budget Summary

As can be seen in Table 7, we anticipate having $343,694 in carryover funds to support implementation of Cohort 2 and dissemination efforts during a NCE. The large carry over is the result of being unable to recruit and implement our RCT during the 2021-2022 and 2022-2023

school years as a result of COVID 19. The final column represents the data in sponsored programs at UL; if a NCE is approved, we will complete a final budget amendment to redistribute our funds into categories that will prioritize implementation in Missouri as well as our final analysis of project results.