Third Coast Learning Collaborative: Developing an Inquiry-Driven Model of School

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Introduction: Inquiry-based learning is a form of active learning that begins by engaging students in posing questions, problems, or scenarios. In contrast to traditional education, where teachers present knowledge about a subject, students identify and research issues and questions to develop their own knowledge or solutions. The proposed EIR Early-Phase project aims to implement an inquiry-driven model of school by applying a systems-based approach to create a "school within a school," a cohort of students within a particular grade level that engage in two primary components:

(1) interdisciplinary project-based learning (IPBL), creating a hands-on space where students

perform standards-aligned projects across all curriculum areas and (2) portfolio-based,

feedback-driven assessment (PBFDA), an assessment approach which engages students in self-evaluation rather than traditional letter grades. Each collaborative cohort generates multi-week projects that create learning experiences and build connections to the local community. These hands-on experiences allow students to engage in learning that impacts the "real world," supported by authentic assessment of their work.

EIR Program Priorities: Orchard View School District (OVSD) with two middle schools: Orchard View Middle School (OVMS) and Reeths-Puffer Middle School (RPMS), in partnership with Human Restoration Project (HRP), Open Way Learning (OWL), and the University of Virginia (UVA), propose the Third Coast Learning Collaborative (TCLC) to address Absolute Priority 1 (Demonstrates a Rationale) and Absolute Priority 4 (Meeting Social, Emotional, and Academic Needs), and Competitive Priority 1 in partnership with Baker College. Our focus on 6th-7th grade aims to counteract the "drop off" of social-emotional well-being, academic achievement, and attendance rates that occur throughout middle school into high school, demonstrating an intervention at a local level with a model that could be applied to additional schools. Students will curate artifacts and reflections on their learning supplemented by iterative feedback from instructors. These metacognitive practices are not only pedagogically sound, but also reflect college

and career environments where the emphasis is on continuous improvement. By changing the overall goals and broad-range scope of classroom design, *TCLC* allows for contextual changes in a variety of learning environments. *TCLC* aims to expand to surrounding districts during the early-phase pilot at multiple grade levels. In the '24-'25 school year, we will launch the *TCLC* at OVMS with ~100 6th graders. In '25-'26, the program will expand to 7th grade. At the same time, in '25-'26, the program will expand to RPMS with ~150 6th graders. Then, in '27-28, the program will expand to 7th grade at RPMS. In total, ~600 students will be served (the total number of students entering the program in 6th grade over 4 years). The external evaluation of *TCLC*, conducted by the University of Virginia, will **assess the impact of these systemic changes, broadly, across three key areas: student mental health & well-being; student engagement & curiosity, and scalability, using a randomized controlled design implementing the What Works Clearinghouse standards without reservations.**

A. Significance

A1. Problem Addressed: The majority of young people are struggling. "We are facing a national mental health crisis that could yield serious health and social consequences for years to come."¹ A survey of 21,678 high school students found that the majority spend most of their days "tired", "stressed", or "bored."² Across the board, American adolescents are facing unprecedentedly rising levels of mental health problems: feeling persistently sad or helpless, with added depression and anxiety.³ A 2018 survey found that 96% of teens identified **anxiety and depression** as a major or minor problem and 70% as a major problem (see Exhibit A, Appendix J). Most tragic, the student **suicide rate** increases over the school year by 30 to 43%.⁴ Based on self-reported survey data from more than 900,000 5th-12th grade students, a 2015-2016 Gallup report found that the number of students "engaged" at school declines from 74% in 5th grade to only 34% by senior year.⁵ Fully 1 in 10 students were categorized as both disengaged and discouraged and reported that they "feel less cared for by adults and see less value in their own work."⁶ Mirroring this decline in engagement,

children ask fewer questions as they proceed through school. Children aged 14-mo to 5 years old ask about 107 questions per hour; elementary school children ask only 2 to 5 questions over 2-hours.⁷ Engagement begins to decline in middle school. Exhibit F (Appendix J) shows what the Gallup report describes as the "school engagement cliff," where engagement drops 34% from 74% prior to the typical middle school years (5th grade) to 40% later (9th grade). More specific to this proposal, in March 2023, Orchard View Middle School (OVMS) students in grade 5-12 responded to 22 survey items in a Gallup Student Poll that measured "engagement, hope, belonging, and social and emotional learning elements." Their responses mirror national downward trends in engagement, hopefulness, belonging, and the increased need for an emphasis on improving social and emotional learning, particularly for middle school students. At OVMS, where the TCLC will be developed and evaluated, 73% of student responses indicated that they were either "not engaged" or "actively disengaged" at school. OVMS saw a decline in each of the 9 items related to the involvement in and enthusiasm for school (see Exhibit B, Appendix J) On Gallup's Hope Index, 56% of OVMS student responses were categorized as "stuck" or "discouraged." On the section on belonging, the school scored below the district average and every item showed a decrease, the lowest scoring items being "My classmates care about me" and "This school is a good place for students like me." The very lowest scoring item was from the series of questions on social and emotional learning where 56% of students strongly disagreed or disagreed with the statement, "When I am angry or upset, I am very good at explaining what is bothering me to other people." Responses also indicated that they do not feel "very good at finding a solution" to interpersonal conflicts. Preserving engagement into high school predicts academic achievement and completion of K-12 schooling. A study of over 11,000 high school students found that student engagement significantly reduced early dropout, when efforts were employed to prevent student alienation and promote academic connectedness.⁸ Students who have high levels of high school engagement celebrate academic success while improving their well-being, leading to higher life

satisfaction and less depressive symptoms and burnout.⁹ Central to preserving engagement and promoting connectedness across the middle school years are key elements of *TCLC*: IPBL and PBFDA, which include self-directed learning and student-centered practices. A longitudinal study of over 1,000 adolescents found that relevant coursework with provisions of choice led to significant increases in school engagement.¹⁰ By providing direct support, creating student-centered practices, and encouraging students with positive beliefs about their academic success, strategies *TCLC* will employ can significantly impact achievement.¹¹

A2. Addressing Equity and Advancement: The United States mental health and engagement crisis has been compounded by the devastating impact of COVID-19. Although disparities in access to mental health resources existed among underserved and marginalized communities previously, they were exacerbated by the pandemic,¹² leading to drastic increases in mental health problems with little access to support for BIPOC students,^{13,14} LGBTQIA+ students,^{15,16} Latinx EL students,^{17,18} disabled students,^{19,20} and underserved students generally.²¹⁻²³ These recent disparities have compounded impacts on inequitably served youth,²⁴ leading to even less engagement and participation in schools by marginalized communities relative to more resourced communities.²⁵⁻²⁹ The proposed project will address these inequities by centering equity, recognizing the sociocultural context of schooling, and by applying asset-based approaches such as culturally responsive pedagogy³⁰ by personalizing the learning experience for students in ways that address their interests and concerns, align with their preferred way of learning, and leverage their "funds of knowledge."³¹ Special attention will be given to amplifying student voice while also providing instructional scaffolding to support learners.³²

A3. Systems Change: The problems and challenges outlined above are rooted in an outmoded school system designed during the early part of the last century to support a growing industrial workforce without the benefit of learning science research we have today.³³ The skills necessary for the twenty-first century job market, such as creativity, systems thinking, perspective taking, abstract

reasoning, awareness, empathy, and technological literacy, are difficult to teach in the traditional factory-model classroom.³⁴ Furthermore, this outmoded system is not meeting student psychological needs for autonomy, competence, and relatedness³⁵ shown to promote well-being and academic learning.³⁶ TCLC intentionally targets these three factors to promote student well-being. engagement, and academic success by helping students design their own projects to address community challenges by engaging in IPBL. TCLC establishes a new "school within a school," creating a new and innovative learning environment for two cohorts of 150 grade 6 students, developing the program and following the students into their 7th grade year (see Table 8). The proposed systemic changes are specifically designed to support students at the margins by altering system elements that have historically harmed and left out students' personal learning narratives (see A2). Further, each systemic change is integrated within a work-based driven learning environment – recognizing that college and career success also rests on self-determination, healthy social-emotional outcomes, and within the spaces of interdisciplinary thought and portfolio-based assessment. Students at OVMS and RPMS will participate in career-driven pathways to learning and certification in partnership with Baker College, located within the OVSD ensuring that all students have the proper systemic support to succeed and a direct pathway to postsecondary opportunities. The TCLC model places learning in the hands of students to create a dynamic space that intersects inquiry, assessment, and curriculum. When these come together, the emerging factors are improved social-emotional health and academic achievement through self-directed learning and teacher/peer relationships. The **PBFDA** model involves students selecting and demonstrating their best works. With this, TCLC shifts typical assessment systems to a portfolio-based model directly engaging students in the assessment process. In lieu of a typical system where students turn in assignments then receive a grade, students complete weekly progress check-ins, reflecting on what they have learned each week and documenting it with evidence translated into a "learning journey" portfolio over the course of a semester, with frequent teacher feedback and requests for iteration

throughout the process. At the end of the portfolio process, a grade is assigned.

A4: Supporting Students' Social-Emotional Well-being and Academic Achievement: This shift from traditional assessment has been linked to better social emotional health (less anxiety about grades with more focus on learning cooperatively) and positive academic learning outcomes.^{37,46} Further, IPBL is associated with increased academic outcomes and interest in all subject areas:⁴⁷ science, ^{48,52} mathematics, ^{53,58} social studies, ^{59,61} and English language arts.⁶² Further, IPBL is associated with higher advanced placement test scores, ⁶³ improved equitable outcomes, ^{64,65} and developing general skills for thriving in the 21st century such as greater agency, self-efficacy, and a better learning experience as a whole.^{66,73} IPBL is designed with marginalized students in mind and includes actionable outcomes, ^{55,56,74,81} alternative assessments such as portfolio-based systems – sometimes referred to as "ungrading,"^{82,48} and activities that facilitate student cooperation⁸⁹ all shown to specifically build more equitable communities that serve **all** learners. IPBL that focuses on action, doing work in a community, moving beyond sit-and-get content, and empowering youth voices supports social emotional justice.^{90,93}

TCLC will implement **interdisciplinary project-based learning (IPBL)**, whereby students learn by doing, interact with their local communities, engage in inquiry-driven concepts, and practice design thinking. This approach is linked to improved social-emotional health, as students see the relevance of their school work in their own lives, are more engaged, and generally enjoy more of their time at school.^{91,94-96} Similarly, portfolio-based, feedback-forward assessment is linked to improved social-emotional health, whereas traditional grading practices are linked to anxiety and other demotivating factors.^{38,44,46,97-98}

B. Project Design

TCLC has specific foundational elements that will be expanded upon in the context of each participating school's specific community needs. Each school will create a "school within a school" (SWAS), a cohort of students randomly assigned to engage in this new model from 6th-7th grade.

After randomization, families will be notified of the SWAS and may opt-out their children upon request (estimated 1-3 per cohort) and will not participate in the evaluation.

Transforming Learning: TCLC will implement 3+ hour blocks into the schedule each week beyond the typical content area classroom meeting times where students engage in interdisciplinary project-based learning (IPBL) (e.g., a 90 minute IPBL period on Tuesday, a 90 minute PBL period on Thursday). During IPBL students brainstorm ideas to address a specific, community-relevant question (e.g. "How do we build a healthy community?" "What are our modern myths, legends, and folklore? How can we effectively tell these stories?" "Who has lived and currently lives on this land? What does it mean to honor those who have come before us?"). Students address these problems in whatever way they choose – engaging in self-directed learning – with teacher-guidance, preparing authentic inquiry into solving the problem or addressing the question (e.g. a mural, public presentation, invention, documentary). This process expands students' voices and agency in the decision-making process promoting their skills to tackle objectives and providing them autonomy in solving problems relevant to today's youth, while learning from others and expanding upon their knowledge. Students are guided through a design thinking process (empathize, define, ideate, prototype, test) during the IPBL block, and engage in community oriented, collaborative activities (e.g., field trips, community member presentations, teacher-led lessons, current events/fiction/non-fiction reading). Teachers across all subject areas contribute to assisting students with their ideas and designs, incorporating subject-matter expertise as needed. The projects are tied to units of instruction and last about 6 weeks.

Transforming Assessment: TCLC will use PBFDA model where students self-select their best demonstrations of meeting a standard, submitting their learning to an ongoing portfolio system through a learning management system and/or educational technology platform. Students identify which standards they are expected to meet, choose criteria that meet these standards (e.g. photos, videos, documents), and submit documentation. Teachers provide feedback but do not give the

student a grade. Instead, after students submit their iterated-upon documentation, a grade is

determined based on the final submission. This process occurs roughly every 2 weeks.

B1. Logic Model and B2. Conceptual Framework (see Appendix G1 & G2)

B3. Goals, Objectives, and Outcomes: TCLC proposes to implement a new learning model in

middle schools in two districts within Muskegon, Michigan. TCLC has established four goals for its

sustained development throughout the EIR grant period and beyond. Table 1 to 3 presents a full

description of goals and performance measures.

Table 1
Goal 1: Students enroll within the TCLC "school within a school" cohort, which expands to additional
students over time.Performance MeasureYr 1Yr 2Yr 3Yr 4Yr 5

Performance Measure	YT I	YF Z	11.2	¥T 4	11.2
1.1 Recruit 2 middle school programs through signed letters of acceptance.	100%	-	-	-	-
1.2 Establish randomized student grouping system for students in the <i>TCLC</i> "school within a school" cohort and typical "control" cohort.	100%				
1.3 Enroll and educate 375 students in the <i>TCLC</i> model, starting with 6th grade and expanding to 7th grade.	11%	33%	55%	77%	100%
1.4 Create a 6th and 7th grade teacher cohort implementing the new <i>TCLC</i> model.	25%	75%	100%		

Because this is a new learning model, teachers must be adequately trained for both educator and

student success - which includes sustaining these changes by training future teachers in this model.

Table 2 Goal 2: Teachers are properly trained to administer the TCLC model within their cohort, and trained to sustain other teachers to sustain the TCLC model.					
Performance Measure	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
2.1 100% of <i>TCLC</i> teachers are trained in designing and facilitating inquiry-based, IPBI	50%	75%	100%		-
2.1.a. <i>TCLC</i> teachers will meet internally at least bi-weekly to refine this project-based learning model to meet school needs.					
2.1.b. <i>TCLC</i> teachers will meet with project partners at least twice monthly to be trained on ongoing project-based learning model implementation.					
2.1.c. <i>TCLC</i> administrators and leaders will meet bi-weekly to develop, plan, and refine implementation of the project-based learning model within school(s).					

2.2 100% of <i>TCLC</i> teachers are trained in designing and facilitating a portfolio-based, feedback-driven model for assessment.	50%	75%	100%		
2.2.a. <i>TCLC</i> teachers will meet internally at least bi-weekly to refine this assessment model to meet school needs.					
2.2.b. <i>TCLC</i> teachers will meet with project partners at least twice monthly to be trained on ongoing assessment model implementation.					
2.2.c. <i>TCLC</i> administrators and leaders will meet bi-weekly to develop, plan, and refine implementation of the assessment model within school(s).					
2.3 100% of <i>TCLC</i> teachers are trained in related frameworks to systemic changes in the <i>TCLC</i> model: self-directed learning and UDL.	50%	75%	100%		
2.3.a <i>TCLC</i> teachers will meet with project partners at least twice monthly to be trained and discuss ongoing self-directed learning and UDL frameworks.					
 2.4 <i>TCLC</i> teachers are trained to facilitate goals 2.1-2.3 with <i>future</i> teachers, sustaining the potential of this model over time. 2.4.a. The initial 6th grade cohort of <i>TCLC</i> teachers will meet in Summer 2025 for training sessions for the incoming group of <i>TCLC</i> teachers. 2.4.b. The <i>TCLC</i> teachers implementing this model up until Summer 2026 will meet for training sessions for final incoming group of <i>TCLC</i> teachers. 2.4.c. All <i>TCLC</i> teachers will meet in Summer 2027, Summer 2028, and Summer 2029 to discuss ongoing practices, refine models, and develop documentation/processes to onboard future teachers to this model. 2.4.d Human Restoration Project will create a website to house this documentation, share information about the program, and help orientation of teachers, families, and students to the model. 	0%	25%	50%	100%	100%

Goal 3: As the TCLC model is implemented in different cohorts, we set a foundation for the model

that must be integrated, with space for expansion depending on the school's context and community.

Table 3 Goal 3: The TCLC model is integrated using an IPBL and PBFDA foundational model in each school's context.						
Performance Measure	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	
3.1 The <i>TCLC</i> schedule sets, at minimum, 3 hours of interdisciplinary, project-based learning time focused on student design thinking and community connections. These projects are student generated based on a thematic question and last, at minimum, 6 weeks each (as defined in A3).	100% (foundational)					
3.2 The <i>TCLC</i> assessment model utilizes a portfolio-based approach, where students are submitting evidence of their learning to teacher provided standards. This evidence is provided feedback versus the standard, at minimum, every 2 weeks. Students must have the opportunity to implement this feedback and improve their grade (as defined in A3).	100% (fo	undational)			

The status of meeting these goals will be monitored through an ongoing report provided by Orchard View School District. All reports will compare completion rates of the data collected against implementation targets. See **Tables 4-7**:

Table 4 - 2024					
Goal	Milestone	Team(s)	Dates		
1.1	School principals confirm school participation.	OV, RP	Spring 2024		
1.2	School administrative teams develop a lottery-based, randomized system for student <i>TCLC</i> cohorts.	OV, RP	Spring 2024		
1.3	Pilot Cohort identified by randomizing the 150 6th grade students at OV into treatment (n=75) and control (n=75) groups.	OV	Spring 2024		
1.4	Initial teacher cohort identified for 6th grade at OV.	OV	Spring 2024		
2.1-2.3	Initial teacher cohort attends twice monthly trainings on implementing the <i>TCLC</i> model and its associated pedagogical understandings.	OV, HRP, OWL	Summer 2024 (ongoing)		
3.1, 3.2	<i>TCLC</i> educators will implement the model with foundational requirements	OV, HRP, OWL	Fall 2024		

Table 5 - 2025					
Goal	Milestone	Team(s)	Dates		
1.3	Cohort 1 students identified by randomizing the 150 6th grade students at OV and RP into treatment (n=150) and control (n=150) groups. 75	OV, RP	Spring 2025		
1.4	The teacher cohort is reconfirmed for 6th grade at OV, a new teacher cohort is identified for 7th grade at OV, and a new teacher cohort is identified for 6th grade at RP.	OV, RP	Spring 2025		
2.1-2.3	Existing and new teacher cohorts attend twice monthly trainings on implementing the <i>TCLC</i> model and its associated pedagogical understandings.	OV, RP, HRP, OWL	Spring 2025 (ongoing)		
2.4	The initial 6th grade OV cohort will meet for a four day summer summit for training and collaborating on the <i>TCLC</i> model with future teachers.	OV, HRP, OWL	Summer 2025		
3.1, 3.2	<i>TCLC</i> educators will implement the model with foundational requirements	OV, RP, HRP, OWL	Fall 2025		

Table 6 - 2026				
Goal	Milestone	Team(s)	Dates	
1.3	Cohort 1 students identified by randomizing the 150 6th grade students at OV and RP into treatment (n=150) and control (n=150) groups.	OV, RP	Spring 2026	

1.4	The teacher cohort is reconfirmed for 6th/7th grade at OV and 6th grade at RP, a new teacher cohort is identified for 7th grade at RP.	OV, RP	Spring 2026
2.1-2.3	Existing and new teacher cohorts attend twice monthly trainings on implementing the <i>TCLC</i> model and its associated pedagogical understandings.	OV, RP, HRP, OWL	Spring 2026 (ongoing)
2.4	6th/7th grade OV and 6th grade RP cohorts will meet for a four day summer summit for training and collaborating on the <i>TCLC</i> model	OV, RP, HRP, OWL	Summer 2026
	with future teachers.		

Table 7			
Goal	Milestone	Team(s)	Dates
1.3	Cohort 2 students identified by randomizing the 150 6th grade students at OV and RP into treatment (n=150) and control (n=150) groups.	OV, RP	Spring 2027/8
1.4	6th/7th teacher cohorts are reconfirmed at OV and RP.	OV, RP	Spring 2027/8
2.1-2.3	Existing and new teacher cohorts attend twice monthly trainings on implementing the <i>TCLC</i> model and its associated pedagogical understandings.	OV, RP, HRP, OWL	Spring 2027 - (ongoing)
2.4	All cohort educators meet for a four day summer summit for training and collaborating on the <i>TCLC</i> model with future teachers.	OV, RP, HRP, OWL	Summer 2026/7
3.1, 3.2	<i>TCLC</i> educators will implement the model with foundational requirements	OV, RP, HRP, OWL	Fall 2026/27

B4. Addressing Needs of the Population: Orchard View School District (OVSD) in Muskegon, MI has seen a significant transition in demographics over the past 20 years. In 2003, community social changes led to a significant increase of families accessing Michigan's *Schools of Choice* protocols to attend schools outside their neighborhoods. As a result, OVSD began transitioning to a magnet district, and as of 2023, PublicSchoolReview.com ranked OVSD in the top 1% most diverse districts in Michigan. Today, 21% of students are Black, 9% of students are Hispanic, 8% of students are two or more races, 1% of students are American Indian, and 1% of students are Asian. 81% of OVMS students qualify for free-reduced lunch. OVMS has also become a magnet school for students with disabilities. Currently, 24% of the students at OVMS have an IEP and qualify for special education services. During the 2017-2018 school year, OVMS was designated for Target Status by the state of Michigan; special education test scores were identified as an area of needed PR/Award # 5411(230217 correction. That year, OVMS's current head principal was hired, and the new administrative team quickly identified that existing staff had a limited understanding of the cultural dynamics created by the shifting demographics. The new administrative team reduced student suspensions in year one by nearly 300% and moved special education away from a traditional Resource Model toward a more progressive and inclusive Workshop Model with special education co-teachers assigned to support students with IEPs in general education classrooms. OVMS improved from the worst least restrictive environment (LRE) percentage in Muskegon County in 2017 to the highest LRE percentage in Western Michigan: 100% of OVMS students have access to general education curriculum/peers for 80% or more of their school day in 2023.⁹⁹ Traditional teaching practices and methodology prevented teachers from connecting with students and thus prevented students from connecting with their education. As the district worked to rebound from the setbacks caused by the COVID-19 pandemic, OVSD established a public commitment to: 1) student belonging and social emotional learning, 2) community/staff-developed Learner Profile, and 3) innovative practices that engage students. In 2021, a Director of Innovation was hired, and aligning district goals with Gallup Polls reporting on student well-being became the center-piece of OVSD's Strategic Plan. More than 20 teachers have been hired since the pandemic, all vetted under the expectation that they were willing to explore and implement IPBL. The Muskegon Area ISD Career Tech Center has a permanent partnership with OVMS; 6th grade students are eligible for *Middle Vision*, a program to explore career pathways after school. Grades 4-7 teachers, have explored PBL and Design Thinking and have strong partnerships with colleges within district borders; Baker College has been active partners with OVMS since 2018. Navigating the shift in racial demographics and the large increase of special education students have been the current administrative team's greatest challenges. When the current building leader took over in 2017, there was not a single person of color on staff. New leadership positions were created including a "Success Coach" and "Youth Safety Advocate" filled by adults of color. These are charged with building relationships with students and supporting

teachers with the complex nature of teaching students from unique, diverse environments. OVSD's administrative team continues to prioritize diversifying staff so that the student population is reflected by the adult population. In 2022-2023, every staff member was trained in Restorative Practices; shifting from a compliance-based mindset for classroom management toward pedagogy that contains elements of IPBL and Design Thinking in lesson planning while differentiating, scaffolding, and accommodating students with IEPs continue to be the primary focuses of staff and administration at OVMS. All of these improvement efforts have set the stage for this innovative Early Phase EIR project.

C. Project Personnel

C1. Qualifications of Key Project Personnel: Human Restoration Project (HRP) is an Iowa-based non-profit organization informing, guiding, and growing a movement toward a progressive, human-centered education system. Founded and led by former public school teachers

HRP conducts in-depth school analysis projects across the and United States and abroad, providing students, educators, and administration with the resources needed to embrace human-centered learning. They apply research-backed practices that increase motivation, engagement, academic achievement, and prioritize social-emotional learning. This is acted upon in three levels of change-making: 1) informing about the need for progressive education; 2) guiding educators through materials and PD on how to implement this practice in their classroom; and 3) growing the movement through coalition building, networking, and grassroots advocacy. and will serve as professional development partners and have worked with schools around the country in redesign efforts, developing a framework for listening to students, partnering with educators, and building systems that work for everyone involved, redesigning schedules, assessment & behavior systems, curriculum, and more. HRP has been awarded multiple grants to redesign schools, developing curriculum for interdisciplinary learning and researching the impact of progressive education on youth. District Leadership Team: A strong leadership team is in place committed to ensuring that TCLC is a success. has served as the head principal at Orchard View Middle School for the past six years. Prior to working with Orchard View, worked at Muskegon Public Schools. As a teacher, he taught 9th grade language arts, International Baccalaureate Theory of Knowledge, and he ran the school Newspaper. After six years of teaching. was asked to take on an administrative role; he was Muskegon Middle School's assistant principal for five years. is a strong community advocate for marginalized student populations. He values equity, student voice, and innovation. currently serves as Reeths-Puffer Schools Director of State and Federal Programs. served as Orchard View Schools Assistant Superintendent of Curriculum Most recently, and Federal Programs from 2015-2023. Prior to his work in the central office setting, was Reeths-Puffer's middle school principal (2012-2015) and a high school assistant principal wrote his doctoral thesis on Student Voice; his work as an administrator has (2005-2012).largely been focused on connecting kids to their education through strong relationships and research-based engagement practices. has served as the principal at Reeths-Puffer Intermediate School for the past four years. Prior to joining the staff at RP, spent five years as an assistant principal and athletic director at Mona Shores (a neighboring district).

maintains that project-based learning experiences within his school have proven to be some of the most fruitful opportunities for his students. Through this form of instructional design, he believes his students not only master the essential content standards of the curriculum, but also extend their learning to make broader connections with their community and lives as citizens. From a visionary perspective, it is his deepest hope that students will begin to find problems within their world and design solutions; this will, in turn, give them the skills needed to succeed in their career after high school. **Design & Implementation Team:** The initial TCLC pilot will involve four existing certified teachers trained in IPBL and Design Thinking who have worked alongside administration and other teacher leaders to identify essential standards and built interdisciplinary project-based units that span all four core academic subjects. Two other instructors will teach traditional sixth grade and their students will serve as the "business as usual" control group. While essential standards remain congruent across programs, no specific pedagogy has been assigned to these teachers; their students will be unique to their team and will not interact academically with the other sixth grade classes. While a majority of learning in the TCLC classes will be interdisciplinary, teachers will also have their own classrooms where students will begin their day with social and emotional learning and community building. Enrichment and Responding to Intervention (RTI) have been built into the daily routine developed by the teacher team. OVMS has been rearranged to accommodate the school within a school. The sixth grade will operate on a different daily schedule and has a designated hallway, separate from the other grade levels including a "Fab Lab" for inter-class collaboration (50 students at a time) and access to the library redesigned to accommodate all 100 students at any given time. The MAISD Career Tech Center, Baker College (BC), and Muskegon Community College (MCC) are all located within a mile of OVMS and are within the district's borders and have supported project-based learning at OVMS over the past two years. OVMS is part of a grant with the MAISD CTC that supports teacher Design Thinking training and implementation. MCC has been very vocal in their interest to continue partnering and innovating with the students and staff at OVMS. Open Way Learning (OWL) is a North Carolina based education nonprofit that will partner with TCLC to co-design this innovative space. OWL advocates for a mindset that calls education stakeholders both in and outside of education to be relentless collaborators through an open source model of collective action. OWL will leverage local assets and expertise to build sustainable cultures of authentic, learner-centered innovation so that TCLC can better meet the individual needs and goals of every student, especially those who have historically been furthest from opportunity. They do this using an open, human-centered design process as the underlying framework for their work, thus ensuring that it remains grounded in empathy, focused on co-designing localized prototypes that are refined in context, and then scaling innovation through a

100% opt-in approach of crowdsourced sharing and networking that builds the collective efficacy needed to sustain and scale innovations over the long term. Evaluation Team: will serve as the Evaluation Director. In this capacity, she will provide substantive, conceptual, and methodological leadership to all aspects of the evaluation, and will enforce rigorous quality standards to ensure that all task work and deliverables are consistent with UVA's high expectations for quality. will oversee all tasks of the project. She will be the primary point of contact for TCLC and the participating school districts. currently serves as a Research Professor at the University of Virginia, at the Center for the Advanced Study of Teaching and Learning. She has served as the lead or co-lead on multiple systematic evaluations, including an EIR Early Phase project. She will devote an average of 25% time to this project. will serve as an Evaluation Investigator. In this capacity, she will provide expertise on the development of implementation rubrics and interviews and focus groups with teachers and students. Specifically, for implementation, will work with TCLC to operationalize indicators of fidelity in their model that can be measured through observation and/or teacher- or student-report. will also work with on study analyses and dissemination efforts, actively participating in the dissemination of study results in the form of papers and conference proceedings.

D. Management Plan

D1. Overview: The Orchard View School District (OVSD) has developed an extensive plan with clearly defined goals and objectives for evaluating, maintaining, and expanding TCLC through the coming years. OVMS's principal, a grant manager, and advisory board, with the support of TCLC partners will implement a systematic, MTSS-aligned data collection system to measure project success toward benchmarks. An advisory committee with parents and stakeholders will review the success of the project each quarter, with a focus on any necessary corrections and sustaining and scaling the program overtime. This team will meet at least quarterly to advise the *TCLC*, including examining student and teacher data, feedback, and monitoring ongoing progress. Data will be used

to guide student outcomes, impact teacher understanding, encourage school to school collaboration and scaling, and directly involve families.

D2. Timeline and Milestones

Year 1 (2024) Milestones: Responsible Parties listed in parenthesis	Due Date
Refine programs, systems, and ideation for Year 1 pilot beginning in '24-'25 school year (OV, HRP, OWL)	Spring 2024
Select/hire any staff as needed for '24-'25 school year, including at least one grant manager (OV)	Spring 2024
Project planning and setup. Securing IRB approval. (UVA)	Spring 2024
Develop implementation measures for study (UVA)	Spring 2024
Biweekly TCLC check-in calls (UVA, HRP, OV, RP, OWL)	Spring 2024 onward
Conduct additional training and focus groups of OV staff, families, and students in PBL, SEL, interdisciplinary learning, and other related systems (HRP, OV)	Summer 2024
Create and identify advisory board (OV)	Summer 2024
Randomly assign students for study (UVA)	Summer 2024
Create educational resources, onboarding tools, and systems for student-centered concepts (such as assessment, curriculum) (OV)	August, 2024 onward
Conduct coaching, observations, and additional pedagogical training (HRP, OWL)	Fall 2024
Develop website for sharing student and educator success in program (HRP)	Fall 2024
Begin advisory board meetings (held quarterly here-after) (OV)	Fall 2024 onward
Recruit students and obtain consent for study (UVA)	Fall 2024
Teachers rate students for data collection and analysis (UVA, OV)	Fall 2024
Students self-rate for data collection and analysis (UVA, OV)	Fall 2024
Train teachers in observation for evaluation: video creation (UVA, OV)	Fall- Winter 2024
Train teachers in implementation for evaluation: video creation (UVA, OV)	Fall 2024 - Spring 2025
Refine and test implementation and outcome measures (UVA)	Fall 2024- Spring 2025
Initial training of teachers (UVA, OV)	Fall 2024 - Spring 2025
Support teachers in program implementation (UVA, OV)	Fall 2024 - Spring 2025
Conduct teacher surveys (implementation questions) (UVA, OV)	Winter 2024 - Spring 2025
Conduct student surveys (implementation questions) (UVA, OV)	Winter 2024 - Spring 2025
Conduct trainings and observations at Reeths-Puffer in preparation for 25-26 school year (HRP, OWL, RP)	Winter 2024
Conduct trainings and observations at Orchard View in preparation for 25-26 school year - 7th grade (HRP, OWL)	Winter 2024 - Spring 2025
Identify pilot group at Reeths-Puffer for 6th grade, identify pilot group at Orchard View for 6th grade and 7th grade (OV, RP)	Winter 2024 - Spring 2025
Teachers rate students for data collection and analysis (UVA, OV)	Spring 2025

Students self-rate for data collection and analysis (UVA, OV)	Spring 2025
Finalize Following Year Plan (UVA, HRP, OV, RP, OWL)	Spring 2025

Year 2 (2025) Milestones: Responsible Parties listed in parenthesis	Due Date	
Refine programs, systems, and ideation for Year 2 pilot beginning in '25-'26 school year (OV, HRP, OWL, RP)	Spring 2025	
Select/hire any staff as needed for '25-'26 school year (OV, RP)	Spring 2025	
Conduct additional training and focus groups of OV staff, families, and students in PBL, SEL, interdisciplinary learning, and other related systems (HRP, OV, RP)	Summer 2025	
Conduct co-sponsored educational event on sharing pedagogy and systems between school districts (HRP, OWL, OV, RP)	Summer 2025	
Randomly assign students for study (UVA)	Summer 2025	
Annual interim reporting (UVA)	Summer 2025	
Create educational resources, onboarding tools, and systems for student-centered concepts (such as assessment, curriculum) (OV, RP)	August, 2025 onward	
Implementation data cleaning and analysis (UVA)	Summer - Fall 2025	
Conduct impact analysis (UVA)	Summer - Fall 2025	
Teachers rate students for data collection and analysis (UVA, OV, RP)	Fall 2025	
Students self-rate for data collection and analysis (UVA, OV, RP)	Fall 2025	
Recruit students and obtain consent for study (UVA)	Fall 2025	
Conduct coaching, observations, and additional pedagogical training (HRP, OWL)	Fall 2025	
Train teachers in observation for evaluation: video creation (UVA, OV, RP)	Fall 2025 - Winter 2026	
Train teachers in implementation for evaluation: video creation (UVA, OV, RP)	Fall 2025 - Spring 2026	
Program implementation training of teachers (UVA, OV, RP)	Fall 2025 - Spring 2026	
Support teachers in program implementation (UVA, OV, RP)	Fall 2025 - Spring 2026	
Conduct trainings and observations at Reeths-Puffer in preparation for 26-27 school year (HRP, OWL)	Winter 2025	
Conduct teacher surveys (implementation questions) (UVA, OV, RP)	Winter 2025 - Spring 2026	
Conduct student surveys (implementation questions) (UVA, OV, RP)	Winter 2025 - Spring 2026	
Conduct trainings and observations at Orchard View in preparation for 26-27 school year - 8th grade (HRP, OWL)	Winter 2025 - Spring 2026	
Identify pilot group at Orchard View for 8th grade (OV)	Winter 2024 - Spring 2026	
Teachers rate students for data collection and analysis (UVA, OV, RP)	Spring 2026	
Students self-rate for data collection and analysis (UVA, OV, RP)	Spring 2026	
Finalize Following Year Plan (UVA, HRP, OV, RP, OWL)	Spring 2026	
External dissemination of conferences and articles (UVA)	Spring - Summer 2026	

Year 3 - Year 5 (2026 - 2028) Milestones: Responsible Parties listed in parenthesis

Due Date

Refine programs, systems, and ideation for Year 3 pilot beginning in '26-'27 school year (OV, HRP, OWL, RP)	Spring 2026/27/28	
Select/hire any staff as needed for '25-'26 school year (OV, RP)	Spring 2026/27/28	
External dissemination of conferences and articles (UVA)	Spring 2027, Summer-Fall 2028	
Conduct additional training and focus groups of OV staff, families, and students in PBL, SEL, interdisciplinary learning, and other related systems (HRP, OV, RP)	Summer 2026/27/28	
Annual interim reporting (UVA)	Summer 2027/28/28	
Implementation data cleaning and analysis (UVA)	Summer - Fall 2026	
Implementation data cleaning and analysis - extended (UVA)	Summer 2027 - Spring 2028	
Conduct co-sponsored educational event on sharing pedagogy and systems between school districts (HRP, OWL, OV, RP)	Summer 2026/27/28	
Create educational resources, onboarding tools, and systems for student-centered concepts (such as assessment, curriculum) (OV, RP)	August, 2026/27/28	
Randomly assign students for study (UVA)	Summer 2026/27/28	
Teachers rate students for data collection and analysis (UVA, OV, RP)	Fall 2026/27/28	
Students self-rate for data collection and analysis (UVA, OV, RP)	Fall 2026/27/28	
Conduct coaching, observations, and additional pedagogical training (HRP, OWL)	Fall 2026/27/28	
Recruit students and obtain consent for study (UVA)	Fall 2026/27/28	
Train teachers in observation for evaluation: video creation (UVA, OV, RP)	Fall 2025/26/27 - Winter 2026/27/28	
Train teachers in implementation for evaluation: video creation (UVA, OV, RP)	Fall 2025/26/27 - Spring 2026/27/28	
Program implementation training of teachers (UVA, OV, RP)	Fall 2026/26/27 - Spring 2028/29	
Support teachers in program implementation (UVA, OV, RP)	Fall 2026/27 - Spring 2028	
Conduct teacher surveys (implementation questions) (UVA, OV, RP)	Winter 2026/27 - Spring 2028	
Conduct student surveys (implementation questions) (UVA, OV, RP)	Winter 2026/27 - Spring 2028	
Conduct trainings and observations at Orchard View in preparation for 27-28 school year - 8th grade (HRP, OWL)	Winter 2026/27 - Spring 2026/27/28	
Teachers rate students for data collection and analysis (UVA, OV, RP)	Spring 2027/28	
Students self-rate for data collection and analysis (UVA, OV, RP)	Spring 2027/28	
Final summative report (UVA)	Summer - Fall 2028	
Finalize Following Year Plan (UVA, HRP, OV, RP, OWL)	Spring 2026/27/28	

E. Project Evaluation

E1. Overview of Evaluation Criteria: The project evaluation plan described below meets the

Early-Phase EIR Program criteria and will include both an implementation and an impact study,

conducted independently by UVA. The randomized design will provide evidence of TCLC effectiveness that will meet the What Works Clearinghouse standards without reservations. The implementation study will monitor implementation fidelity and identify areas where improvement is required and factors that may hinder or facilitate implementation. The study reports include detailed information about context and procedures to enable replication. Below we articulate the plan for collecting valid and reliable performance data on key project components, moderators, mediators, and student outcomes.

E2. Research Questions: UVA will use a randomized design to determine whether outcomes differ among students who are randomized to attend the TCLC program, compared to students in the same school(s) randomized to participate in the traditional curriculum. The evaluation team will match students and then randomize them to participate in one of two "school-within-school" models. In addition to implementation questions about the extent to which the inquiry-driven school model is implemented with fidelity, we will address the following impact questions:

(1) What is the impact of participating in TCLC on students' engagement in learning? (2) What is the impact of TCLC on teacher-student and peer relationships? (3) What is the impact of participating in TCLC on students' achievement, attendance, well-being, and emotional and behavioral problems? (4) To what extent is the impact of participating in TCLC on student demographic characteristics? (5) To what extent is the impact of participating in TCLC on student outcomes moderated by student demographic characteristics? (5) To what extent is the impact of participating in TCLC on student outcomes mediated by (a) quality of teacher-student and peer relationships and/or (b) student engagement in learning? We hypothesize that, compared to students participating in the traditional middle school model, students in TCLC will: (1) be more engaged in school; (2) have higher quality relationships with their teachers and peers; and (3) experience higher academic achievement and psychological well-being, and decreased absenteeism and behavioral and emotional problems. Furthermore, we hypothesize that student outcomes will be mediated by (5) the quality of relationships with teachers and peers. The question about moderating effects of

student demographic background is exploratory.

E3. Design Overview: The evaluation will use a randomized effectiveness design in which the outcomes of 6th grade students participating in the inquiry-driven school model for two academic vears will be compared to the outcomes of students attending the traditional middle school model (i.e., business as usual). Randomization will be at the student level with a total of 440 students in the full study attending 2 middle schools in western Michigan. We chose to randomize at the student level for three reasons. First, the process by which TCLC establishes an inquiry-driven model is by gradually shifting practice to a partial and then whole school inquiry-driven model. Thus, the evaluation design reflects the development process of the program being evaluated. Second, in accordance with this development process, schools and the team of teachers in the inquiry-driven model agree to participate as a team in an adjusted school schedule with an interdisciplinary project-based curriculum. This means that students in the inquiry-driven model will have all of their core academic courses with participating teachers, and students in the control condition will have their academic courses with a separate team of teachers with a separate schedule and different curriculum. As such, there is a minimal risk of contamination across intervention and control classrooms, as there is no risk of students being exposed to different treatment conditions than originally assigned. Third, due to the school-within-a-school model of development, it is not possible to randomize by classrooms or schools.

E4. Sampling Plan: Among the 300 6th grade students attending both schools (n=150 6th grade students at each of the 2 middle schools), one-half (n=150) will be randomly selected to participate in the inquiry-driven school model, and one-half (n=150) will be randomly selected to participate in the traditional school model in their respective schools. The project will include 3 total cohorts of 6th grade students: 1 Pilot Cohort (2024-2025 school year), and 2 Study Cohorts (2025-2026 and 2027-2028 school years; see Table 8). In Spring 2024, UVA will recruit 5th grade students to participate in the evaluation, with a goal of recruiting 110 students (73%) to support preliminary

analysis of outcome and implementation measures. In Summer 2024, UVA will randomize all rising 6th grade students at Orchard View (OV) Middle School to generate the Pilot Cohort. Specifically, all students who consented to participate will be randomized first, followed by students who did not consent to participate in the study. During the pilot year, TCLC will pilot test the inquiry-driven school model and UVA will assess preliminary effects among one 6th grade cohort on the outcome measures (see Appendix J) and will pilot the newly developed implementation measures.

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lable	8.	Study	overview

Middle	Grade	Prep Period	Grant Year 1	Grant Year 2	Grant Year 3	Grant Year 4	Grant Year 5
School	Level	Pre-Pilot	Study Year 0 (Pilot)	Study Year 1	Study Year 2	Study Year 3	Study Year 4
		Jan-Aug 2024	2024-2025	2025-2026	2026-2027	2027-2028	Aug-Dec 2028
Reeths-	6 th			Cohort 1 (n=110)	Cohort 2 (n=110)		
Puffer	grade						
	7 th				Cohort 1	Cohort 2	
	grade						
Orchard	6 th		Pilot Cohort (n=110)	Cohort 1 (n=110)	Cohort 2 (n=110)		
View	grade						
	7 th			Pilot Cohort	Cohort 1	Cohort 2	
	grade						
Total Number of Students Per Cohort		Pilot Cohort = 110	Cohort 1 = 220	Cohort 2 = 220			

In Spring 2025, UVA will recruit 5th grade students at OV and RPMS after, with a goal of recruiting 110 students (73%) at each school (n=220). Then, in Summer 2025, UVA will separately randomize the group of students whose parents consented to participate and the students whose parents did not to generate Cohort 1 of the full study at each school. This process will be repeated in 2025-2026 for Cohort 2. To recruit students, UVA will send consent letters and forms for parents of 5th grade students in the late spring of the school year. Based on parent participation in family surveys and similar outreach to parents by the district, it is anticipated that up to 80% of students will obtain permission to participate in the evaluation. We aim to recruit and retain 73% of students over the two years of the evaluation for each Cohort. According to The Generalizer⁹⁹⁻¹⁰⁰ this sample size would enable us to detect an effect size of 0.17 on student outcomes with standard parameters for social science research (i.e., 80% power, two-tailed hypothesis test, and 0.05 probability of Type I Error, and at least 60% of the variance in student outcomes explained by covariates (e.g., student prior achievement and student demographics).

E5. Implementation Fidelity. The implementation study will follow the logic model for this project (Appendix G1) that specifies the key components of the intervention. UVA will lead the implementation study to address the following implementation questions: (1) To what extent is the TCLC framework implemented with fidelity, including: (A) Facilitators: Adherence to the framework in developing the Inquiry-Driven School Model. (B) Teachers: Implementation of model components (a) IPBL (b) PBFDA. (2) What classroom and student factors are related to variation in fidelity of implementation? To answer these questions, UVA will partner with TCLC to operationalize indicators of implementation quality and fidelity, and will work with both TCLC and teachers at OV to develop and pilot test implementation measures - including interviewing teachers and doing focus groups with students to ensure that the components and metrics for implementation fidelity and quality adequately capture their experience of the TCLC model of inquiry-driven school, in addition to aligning with TCLC's framework. Throughout the study, UVA will assess the extent to which facilitation and implementation of the model meets program fidelity and quality metrics using teacher-report, student-report, and observational measures (see Appendices J3-J6). Each Spring, teachers participating in the model will complete online surveys regarding their use of portfolio assessments and teachers and students will report on teachers' implementation of IPBL lessons. In October, January, and April of each implementation year, developer-trained observers will observe and rate the fidelity of inquiry-driven implementation in all classrooms. Both treatment and control classrooms are observed to determine the degree to which control classrooms are adequate counterfactuals for the comparison. Specifically, the rubrics will assess the extent and quality of inquiry driven practices across classrooms. Implementation questions will address the fidelity of implementation and student, classroom, and teacher factors related to variation in implementation, and will be rated and informed by a rubric that will establish thresholds for satisfactory levels of implementation. All implementation and fidelity measures will be developed and tested before the full study begins. Specifically, during the preparation period (January - July

2024), the evaluation team from UVA will work with TCLC to operationalize the key components of the model. Then, during the pilot year (August 2024-July 2025), TCLC will partner with teachers to ensure that the measures accurately reflect their understanding and perspective on the model components and practices, and the UVA team will test the use, alignment, reliability, and predictive validity of each measure/informant and indicator of fidelity of implementation.

E6. Outcome Measurement & Data Collection Schedule. Appendix J provides an overview of the measures used to assess the proximal and distal targets of the inquiry-driven school model and the collection time points. All measures have been used in research with similar samples (teachers and students of a similar age) and have satisfactory to excellent reliability and validity. Student self-and teacher-reported outcomes will be measured starting from fall of the pilot year (2024) through the spring of the follow-up year (2028). Implementation data will be gathered from teachers, students, and observers in treatment schools. To assess the counterfactual, implementation of inquiry-driven practices will be assessed in control schools through observation and teacher report. School records will be accessed annually (2024-2027) to examine covariates, student academic performance and standardized achievement tests, and attendance.

E7. Analytic Methods. In the proposed evaluation, the intervention occurs at the school-level, with randomization at the student level. The impact analyses will compare mean differences on all student outcomes between treatment and control students with a repeated measures approach. For student outcomes measured with student self-report or from school records, we will run within-subject Analyses of Covariance (ANCOVAs) that incorporate data collected at all 4 timepoints across both implementation years per Cohort. These models will include student prior achievement and demographic characteristics as covariates, and will block on school and grade level (i.e., include school and grade-level as a fixed effect), which will enable us to examine differential effectiveness over time by school and grade-level. For student outcomes reported by teachers (i.e., student behavioral problems and teachers' perspective of their relationship with the

student), a repeated measures ANCOVA that examines impacts for each implementation year per Cohort will be employed. UVA will conduct initial comparisons of the inquiry-driven and traditional models of school in Summer 2026 to test whether the effects on students are evident after one year of implementation, and we plan to examine potential additive and summative effects over the first and second years for each study Cohort (RQ1-3). In addition to the main impact models, UVA will conduct differential impact analyses to examine whether student, teacher, and school characteristics moderate the impact of the model (RQ4). Mediational analyses will explore potential teacher and student mechanisms through which the model will impact student outcomes (RQ5). Further details on the power analyses for each outcome are provided in Appendix J7. Impact analyses will follow an "intent-to-treat" model (all students included in the outcome analyses regardless of the level of implementation), the recommended approach for testing efficacy in randomized trials by the What Works Clearinghouse. (See Appendix J6 for additional information about the methodology and analysis plan).

E8. Implementation Evaluation and Fidelity Thresholds: During the first year of the project, the project team will develop fidelity measurement tools and a fidelity threshold score which will support our understanding as to whether teachers are implementing practices sufficiently to achieve intended student outcomes. The threshold score is a predetermined level on a fidelity tool that distinguishes between practitioners not demonstrating and those demonstrating adequate practice implementation. This will enable us to identify teachers who may need more support and practice to reach fidelity and those whose support could be reduced. Over the course of the project, we will use the fidelity tools each semester to identify teachers whose practice implementation may have drifted from acceptable to unacceptable levels over time. The steps we will take in the development of fidelity tools can be found in Appendix J5.