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Introduction

San Diego Unified School District (SDUSD), in partnership with Thinkist, PBC is excited to apply for this EIR opportunity. SDUSD serves over 20,000 middle school students across 38 middle schools and 25,000 high school students across 25 high schools. In 2021-22 SDUSD's high-needs student population was 7.3% Black, 44.2% Hispanic, 9.7% Asian, 23.7% white, and 8.6% two or more races. Approximately 54.7% are socioeconomically disadvantaged. For the purposes of this application, we define **high-needs students** as those who are socioeconomically disadvantaged, are at-risk of failing due to social or academic issues; have disabilities; are English language learners; or are from underserved minority groups.

Thinkist, PBC is a public benefit corporation (PBC) dedicated to revolutionizing the tutoring industry to provide ***high-quality, accessible academic support to all students in need, regardless of a student's socioeconomic status***. In school year 2021-2022, Thinkist partnered with SDUSD and successfully piloted a version of the program proposed here. The positive results from this pilot effort, coupled with the evidence-based pillars of the Thinkist program, have motivated SDUSD and Thinkist to expand this partnership. EIR funding will support rigorous research on the program's impact on achievement gaps in math.

This project, to be known as ***MetaSocratic Peer Tutoring***, addresses **Absolute Priority 1**: **Demonstrates a Rationale** (see logic model, **Appendix C**), and **Absolute Priority 2**: **Field Initiated Innovations—**to create and take to scale entrepreneurial, evidence-based, field-initiated innovations to improve student achievement and attainment (by providing low-achieving, at-risk students with high-quality peer and near peer tutoring). This proposal also meets **Competitive Preference Priority 1—Promoting equity in student access to educational resources and opportunities** by providing high-needs students with high-quality learning content through near-peer tutors such that they can participate in advanced coursework

in high school and **Competitive Preference Priority 2—Addressing the impact of COVID-19 on students, educators, and faculty**. ***MetaSocratic Peer Tutoring*** employs specific strategies for re-engaging and supporting students and families through their tutors. The entire ***MetaSocratic Peer Tutoring*** project is grounded in evidence-based instructional approaches and supports, including expanded learning time.

A. Significance

The benefits of tutoring and peer assisted learning strategies are well documented.[1] **And the need is imminent:** on July 5, 2022, the Biden-Harris administration released a call-to-action [2] aimed at providing high-quality tutoring, summer learning and enrichment, and afterschool programs to address learning loss caused by the pandemic. The US Department of Education also called for more tutoring in order to close learning gaps from COVID-19. [3] **According to a recent publication by researchers at the Brookings Institute, learning loss was more profound in mathematics as compared to reading**.[4] SDUSD is no exception. The district found, post-pandemic, that among its high school population, nearly 40% of all grades received in math courses were Cs, Ds, or Fs. **There is also a national need for interventions that close gaps in academic achievement, and near peer tutoring is one such promising intervention.**

The private tutoring industry has grown significantly over the last 25 years. However, there is a considerable equity gap in who receives tutoring due to the high cost of service vs. the need low-income students have for its benefits. Typical tutoring costs can range from $50-$400/hr., depending on the context. In addition to cost increases, between 1997 and 2016, the number of tutoring centers tripled from approximately 3,000 tutoring centers to nearly 10,000.

Notably, the growth has geographical significance, as these tutoring centers are disproportionately located in more affluent and educated neighborhoods. [5] A qualitative study done by Ochoa (2013) exemplifies this notion, as the study found that tutoring was much more

common among high-income and high-achieving students, leading to inequities in supplemental education.[6] **SDUSD, as well as many of our nation's largest school districts, needs accessible solutions to increase academic achievement for students who need it most.**

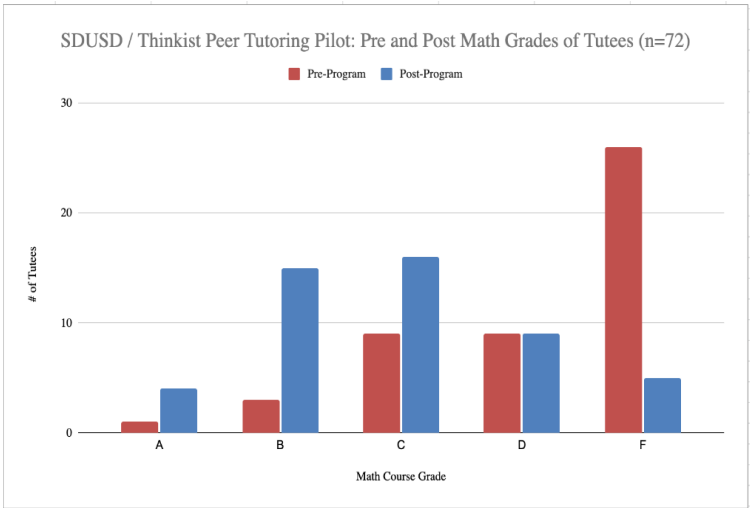
Lack of tutor training is highlighted as a key deficiency of tutoring programs, and research also reinforces the benefits of quality training and development opportunities for tutors.[7] Studies have shown that peer tutors, especially new peer tutors, need high levels of support and training in order to be successful.[8] **The need we are addressing with *MetaSocratic Peer Tutoring* is for a high-quality, accessible, and SCALABLE peer tutoring program that includes both academic and social emotional tutor training and development.**

The proposed project involves promising new strategies

SDUSD is committed to transforming the lives of its students across one of the most multicultural cities in the nation (according to the US census, nearly 41% of residents ages 5 and older speak a language other than English at home). In SY 2021-2022, SDUSD partnered with Thinkist to pilot these **promising new strategies** for new peer tutors: **1) comprehensive tutor training including social emotional learning, 2) ongoing instructional supports, 3) a learning management platform, and 4) mentorship from tutoring experts.**

SDUSD and Thinkist completed a successful Level 1 Foundations of Tutoring pilot program in the Spring semester of 2022 with peer tutors and tutees participating from 20 high schools. Thirty-six peer tutors enrolled in the pilot with thirty-four (94.4%) completing the program and receiving Level 1 certification. (Qualifications for certification are based on a rubric that includes six dimensions: Participation, Communication, Time Management, Session Logs, and Comportment. See **Appendix J.1** for a description of the certification process.) After an initial three weeks of training, each peer tutor was matched with two tutees. Each of 70 tutees participated in thirteen weekly 1.5-hour online tutoring sessions. Accounting for cancellations

and absences, a total of 762 hours of tutoring were completed from March 27 to June 16, 2022. SDUSD also undertook a correlational analysis of improvements in grades during the Thinkist pilot. **Students receiving tutoring had increases in the number of A's, B's, and C's while failing grades dropped by over 80% (see graph).**



The results did not stop there: **one of the key aspects of the social-emotional training program is helping peer tutors and tutees to normalize confusion**. Students often feel embarrassed about not knowing an answer in front of their peers, which often leads to a lack of engagement and the shutting down of critical thinking. Normalizing confusion helps peer tutors to be kinder with themselves and to their tutees, promoting peer tutor and tutee engagement and persistence with challenging problems. Prior to the program, both tutors and tutees were asked, ***"Imagine yourself in a classroom. You are asked a question you don't know the answer to. What is this experience like for you?"*** Before the program, 66% of peer tutors and 65% of tutees responded with significant feelings of embarrassment, stress and or anxiety. Example responses included: *"When called on and I don't know the answer, I get very anxious. My face turns red and my voice turns quiet. I feel embarrassed and just say I don't know."*

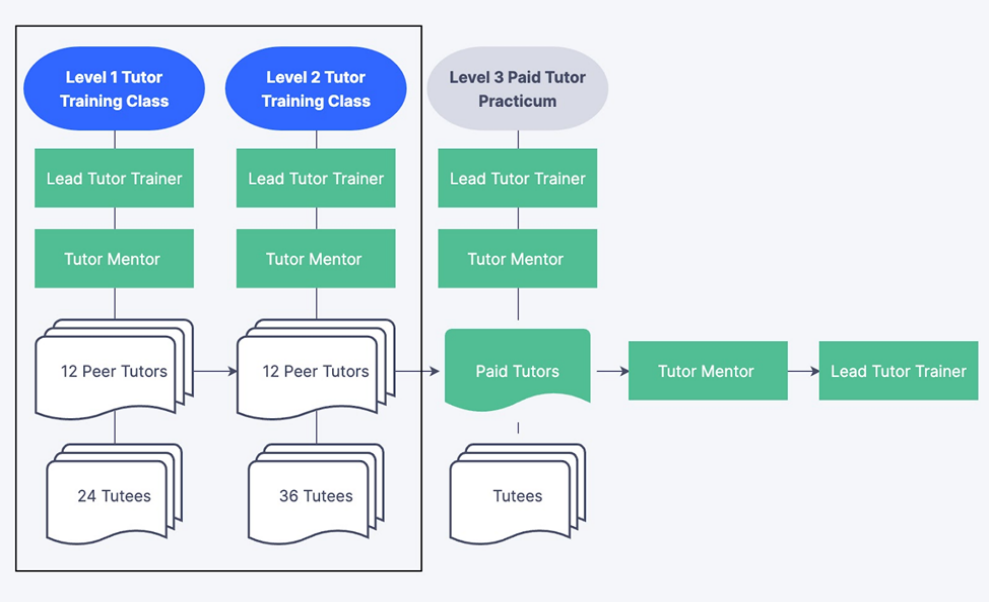
and *"I feel panicked and stressed because I feel like everyone is going to laugh at me for getting it wrong."* **After the program, 91% of tutors reported feeling less self-critical about not knowing an answer to a question.** One goal for the pilot was that 33% of students would be

interested in proceeding to Level 2 Training. More than double that number (70%) indicated their interest. Please see **Appendix J.2** for other promising survey results.

B. High-Quality Project Design

The MetaSocratic Peer Tutor program invites 10th through 12th grade academically proficient and higher math students to tutor low-performing students in grades 9-11, helping them to improve their academic outcomes and preparation for STEM subjects and careers. A secondary goal of the program is to provide work-based learning experiences to introduce high school students in Education and Child Development career pathways and introduce and inspire students to pursue education as a potential career path via the integration of tutoring and leadership training. Thus, the curriculum supports student success via developing the academic and social emotional acumen of both tutees *and* tutors themselves.

These students have opportunities to progress through three levels of semester-long **peer tutoring certification classes** (Level 3—see graphic, next page—is not included in this grant application). Peer tutors earn tutor certification for each level by completing the training course and the required practicum hours by working online with tutees (Level 1: two 1.5-hour tutoring sessions/week. Level 2: three 1.5-hour sessions/week.). Peer tutors can also earn high-value **community service hours** (58.5 potential community service hours for Level 1 and 78 for Level 2). After Level 2 certification, Thinkist program graduates have opportunities to earn income as tutors, tutor mentors, and peer tutor class instructors while attending college (see graphic).



Level 1 Training

- 12 Peer Tutors meet weekly over fifteen weeks for a 1.5-hour online class with a Lead Tutor Trainer and a Tutor Mentor; the first three weeks are an induction period, focused strictly on Tutor training.
- Each Peer Tutor is assigned two tutees after the third week, providing 1.5 hours of tutoring for each tutee each week for the remaining 12 weeks of the program.
- Peer Tutors complete a reflective session log with the Tutee at the end of the tutoring session reviewing what they worked on, emphasizing process, and reviewing goals to be completed before the next tutoring session. Peer Tutors flag session logs when issues arise in the session.
- Tutor Mentors review and approve the session logs daily, providing feedback and connecting with the Peer Tutors as needed. Session logs are automatically emailed to the student and parent after approval. Tutor Mentors use a rubric after each milestone (objective) in the training curriculum to assess peer tutor progress towards learning goals.

Level 2 Training (Same as Level one training with the following differences.)

- Limited to students have successfully completed Level 1 training.
- Class length is reduced to 1 hour.
- Peer tutors are assigned three tutees instead of two in the second week of training.
- Student learning objectives are assessed using the Level 2 learning objectives rubric.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Tutors Applied	200	300	400	450	450	**1,800**
Tutees Applied	400	600	800	900	1,000	**3,700**
Tutors Enrolled Level 1 Training	84	120	144	180	204	**732**
Tutors Enrolled Level 2 Training	40	85	100	110	120	**455**

After graduating from high school, students enrolled in higher education who have successfully completed Level 2 training are eligible to apply as paid Level 3 tutors. Level 3 tutors must complete fifty hours of Level 3 paid practicum hours to receive Level 3 training certification. Level 3 tutors receive ongoing support from an assigned Tutor Mentor. Tutors who have completed Level 3 training are also eligible to be Tutor Mentors and Lead Tutor Trainers.

At scale, 40% of program fees is paid out directly to students who have graduated from the program. Students who complete the Level 1 and Level 2 pathway have an opportunity in Level 3 for high-wage employment, providing opportunities for college students who may otherwise have to work more hours for lower paying jobs that are disconnected from their educational trajectories. In addition to studying students' academic outcomes, Thinkist will measure the effectiveness of its social emotional training program via rubric exercises that include the following student learning outcomes:

Learning Outcomes
1. Students will be able to describe how their tutoring ability has improved via practice with the Thinkist Tutoring Cycle
2. Students will be able to detect a growth in leadership capacity by using the Thinkist Learning Framework
3. Students will be able to report improvement in their andragogical knowledge by applying the Thinkist MetaSocratic Pyramid (see **Appendix J.3**)

Learning Outcomes
4. Students will be able to indicate how they supported equitable learning spaces via applying socioemotional learning
5. Students will be able to evaluate if the field of education is a potential career path in the future
6. Students will be able to perceive a growth in their own self-confidence in math via immediate, application of course concepts

For a detailed version of the curriculum, including activities, required technology, assessments, and reflections/practice, please see **Appendix J.4**.

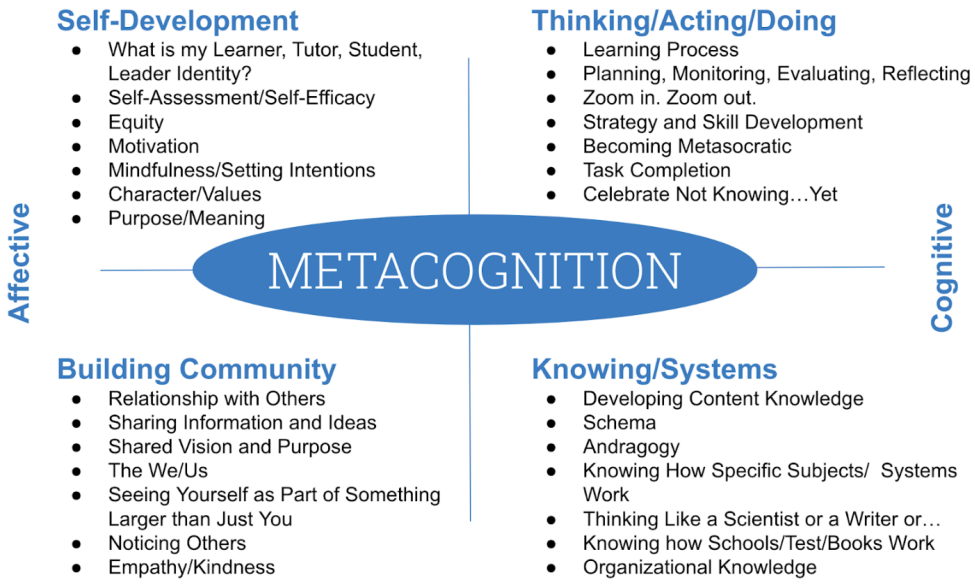
Recruiting, marketing, and selection is a critical success factor for this project. All CCTE students with course grades C or below in Math in grades 9-11 will be eligible for tutoring. Thinkist will produce marketing materials that describe the program structure and benefits, and SDUSD will distribute the materials and encourage students and families to participate. CCCTE instructors, Math instructors, and counselors within each school will also be involved in the recruitment process by inviting students with Cs, Ds, or Fs in math to participate. Additionally, SDUSD will use social media platforms to showcase student experiences and build awareness of program benefits. For the pilot, after only one program information email was sent out, more than the targeted number of applications were received by the next day, with no reminders or promotion. Thus, given the number of students who are eligible to be tutors (students with A or B grades in Math, n>6,000) and tutees (students with C, D, of F's >4,000, recruiting targets will be met.

(1) High-quality conceptual framework underlying the proposed research

Well-trained, online tutors need to develop expertise at how to "individually and humanistically support the whole person".[9] Since remote learning environments have the potential to be isolating and lead to student depression and anxiety [10], positive, educational relationships can then become the "connective tissue between students, engagement, and rigor".[11] Truly, the COVID-19 pandemic led to the realization that all educators need continued

and ongoing professional learning opportunities to appropriately support the diverse needs of the whole student, including their cognitive and affective domains.[12] Therefore, as we now continue to improve what the professional development of educators might look like in our post-COVID world, **we should also continue to develop tutor training to better support students in all possible educational spaces, including online.**

The Thinkist Learning Framework considers these affective and cognitive dimensions of learning in online spaces and builds upon the Community of Inquiry approach: Interconnected domains of cognitive, social, and teaching presence.[13] In sum, the role of the well-trained tutor within this conceptual framework is to "support and enhance social and cognitive presence for the purpose of realizing educational outcomes". Grounded in this work, the Thinkist Learning Framework utilizes *metacognition* and *integrated learning quadrants* to support both tutor and tutee academic and personal development.[14] Hence, the tenets of the Thinkist Learning Framework provide an ongoing container in which metacognitive professional and leadership development can occur with the explicit understanding that one may never fully complete development in any area so that professionals can continue to strive to improve as educators.[15]



- **Affective – Self-development:** How to work on yourself to support others' self-development
- **Affective – Building Community:** How to work within encouraging groups and environments
- **Cognitive – Thinking/Acting Like a Tutor:** How to develop guiding techniques to support study skills, strategies, and critical thinking
- **Cognitive – Knowing/Systems:** How to define knowledge and learning how to learn

Tutors who are trained to acknowledge and expect varied and idiosyncratic student needs—understanding that the tutees will potentially have different educational, societal, economical, and/or technological backgrounds than their own—**will be better prepared to support the academic needs of students on a one-to-one basis.** And while there are other factors that influence successful tutoring sessions—including differing academic, economic, and social backgrounds of both tutor and tutee—**how students *feel* about educators and educational settings can impact their ability to learn and feel accepted or that they simply belong** within educational spaces.[16] This is especially important to keep in mind for remote learning where "descriptive studies of online programs suggest that relationships are a particularly critical feature for maintaining engagement".[17] **Thus, training tutors across multiple, integrated conceptual domains via reflective practices that focus on both cognitive and affective development will support academic and personal development for both tutors and tutees.**

(2) Goals, objectives, and outcomes are clearly specified and measurable

In partnership with SDUSD, Thinkist will work with 1,904 tutees and 659 tutors across 25 schools, serving approximately 1,300 high-needs students to achieve **four program outcomes: (1)** Train and develop 659 new 10th - 12th grade **tutors** who are grounded in each of the Thinkist SEL pillars (Tutoring, Leadership, Andragogy, and Equity) through the MetaSocratic Tutor-Training Program; **(2)** Close achievement gaps in mathematics for 1,904 high-needs, low

performing students **(tutees)** across 25 schools through high-quality peer tutoring; **(3)** Refine and strengthen tutoring and leadership development curriculum and technology platform utilized **to scale the program with quality and fidelity** to the model; and **(4)** Assess the impact of the MetaSocratic Tutor Training program on the academic achievement and social emotional learning of **tutees and tutors**, including narrowing achievement gaps between student subgroups (Black, Hispanic, Native American, White, low-income students with disabilities).

The following table details the goals and related measurable objectives for this EIR project with targets by project year:

GOAL 1: Improve student (tutee) academic growth and achievement, and impact their social emotional skills positively.					
OBJECTIVES	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**
1. Increase the # of students who complete at least 15 hours of tutoring (12 1.5-hour sessions)	**219**	**320**	**399**	**454**	**512**
2. Decrease the % Ds and Fs in math, grades 9-11	**30 BL**	**25**	**20**	**15**	**10**
3. Increase the % of students that demonstrate proficiency on the CAASPP exam in 11th grade	**41 BL**	**45**	**50**	**55**	**60**
4. Increase the % of tutees showing significant improvement in each of the Thinkist SEL pillars (Tutoring, Leadership, Andragogy, and Equity)	**50 BL**	**55**	**60**	**65**	**70**
GOAL 2: Increase the number of highly qualified mathematics near peer tutors and impact their social-emotional skills positively.					
OBJECTIVES	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**
1. # of qualified applications from 10th, 11th, and 12th grade tutors for training	**200**	**300**	**400**	**450**	**450**
2. # applicants who complete Level 1 Tutoring Program with Baseline Certification	**75**	**108**	**130**	**162**	**184**
3. # of tutors who complete Level 2 Tutoring Program with Certification	**36**	**77**	**90**	**99**	**108**
4. % of peer tutors showing significant improvement in each of the Thinkist SEL pillars (Tutoring, Leadership, Andragogy, and Equity)	**65**	**70**	**75**	**80**	**85**
GOAL 3: Improve the tutee and tutor experience in the MetaSocratic program.					
OBJECTIVES	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**
1. # of applicants with Cs, Ds, or Fs from 9th, 10th and 11th grade to receive tutoring	**400**	**600**	**800**	**900**	**1000**
2. Increase the % attendance at tutoring sessions	**65**	**71**	**75**	**78**	**80**
3. Increase the # of session logs completed by tutors during the session or within 10 minutes of the session being completed	**50**	**55**	**60**	**70**	**90**

4. Increase efficiency in the enrollment process by decreasing time to schedule and enroll a tutee (# of hours)	**1.75**	**1.5**	**1.25**	**1.0**	**.45**
GOAL 4: Improve and evaluate the implementation of the Thinkist program components at scale.					
OBJECTIVES	**Y1**	**Y2**	**Y3**	**Y4**	**Y5**
1. Ensure fidelity monitoring as the program scales (% of fidelity measures met)	**70**	**80**	**90**	**95**	**95**
2. Complete implementation study, including surveys of participants and stakeholders (% of parents, tutors, and tutees who would recommend the program to others)	**70**	**80**	**90**	**95**	**95**

In addition, SDUSD and Thinkist will collect data on all US Department of Education GPRA measures.

(3) The project will meet the needs of the target population

The need to serve high-need, low-performing students. SDUSD is the 17th largest school district in the country and the 2nd largest district in California, with over 130,00 students and a significantly underserved population. Specifically, the College, Career, and Technical Education (CCTE) students, the target audience for this grant, in 25 SDUSD high schools have over 15,000 students, 56% socio-economically disadvantaged, 47% Hispanic, and 12% ELL. The population of disadvantaged students is large.

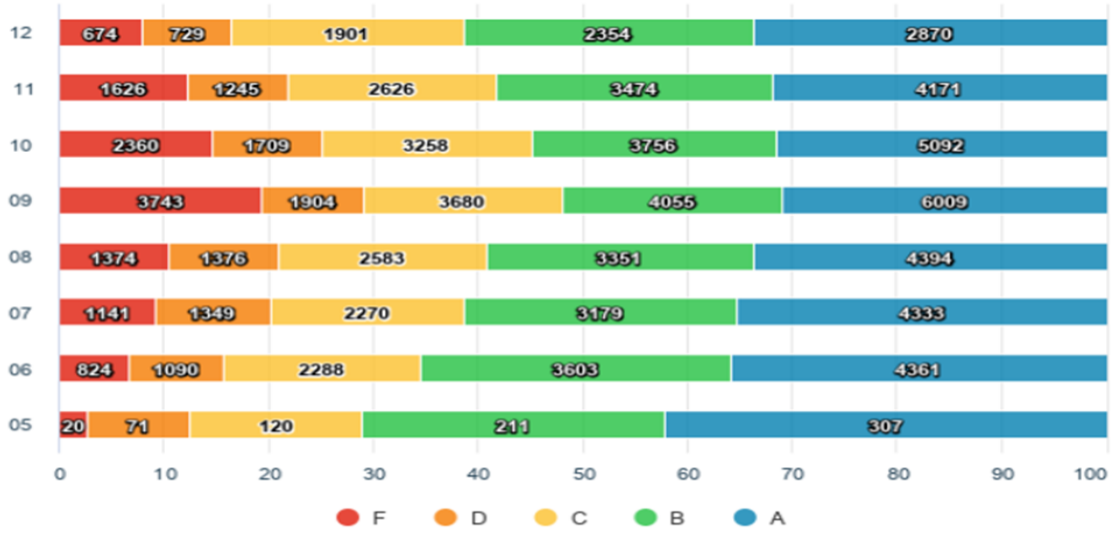
The need to close achievement gaps and improve academic achievement in mathematics for a high-need student populations. CCTE Pathway Programs include four core components: **1)** rigorous academics; **2)** high quality CTE sequence of courses; **3)** work-based learning experiences; and **4)** student supports. The majority of the pathways require student proficiency in math. However, over the past three years, only 40% of students who completed a CCTE pathway program met state standards in mathematics. This proficiency rate was even lower for

Percentage of CCTE Graduates Proficient in Math in 11th Grade (CAASPP Scores)				
Cohort Year	2018	2019	2020	2021
Overall	41.38	42.93	42.02	NA-COVID
SPED	13.89	14.63	19.19	NA-COVID
SED	31.88	32.50	28.72	NA-COVID
ELL	18.88	33.68	8.80	NA-COVID

minority subpopulations (see table).

These CCTE trends parallel that of ALL SDUSD students. In SY21-22, in grades 5-12, approximately 35% of grades given in Mathematics were C's, D's, or F's. p.

Figure 2: Counts and Percentage of Mathematics Grades, by School Grade, SY21-22



The need for affordability. ***MetaSocratic Peer Tutoring*** is designed to address inequities in access to quality tutoring, develop students' metacognition capabilities and intrapersonal skills, and close learning gaps in math exacerbated by COVID 19, ensuring CCTE students can complete their pathways with the requisite qualifications to pursue their careers of choice. Although there has been a rise in the number of tutoring centers in the US, they are concentrated largely in affluent areas. The costs associated with tutoring are out of reach or not sustainable for many families. ***MetaSocratic Peer Tutoring*** makes high-quality tutoring both accessible and affordable.

The need for a pipeline of students who pursue STEM careers from minority backgrounds. Numerous studies have shown a disparity in the number of minority students who pursue STEM careers, yet everyone, regardless of race or socio-economic background, should have the right to pursue the career they desire. To pursue a STEM career, students need both

expressed interest in STEM and strong academic achievement in STEM subjects. A study by ACT found that 64% of White students had both interest in STEM careers and met mathematics benchmarks, compared to 44% of Hispanic students and 24% of Black students.[18] The Thinkist program aims to address this gap between desire and proficiency; it is designed to "lift" students' interest, commitment, and ability to pursue STEM careers, which are cited as the necessary components for ensuring minorities can persist in STEM careers.[19]

The need for a pipeline of diverse students who pursue careers in education. Developing a racially diverse teacher workforce has long been cited as crucial to improving student performance, especially among Black and Latino youth.[20] Studies show all students benefit when they have access to teachers of color, but this is especially true for minority children. They have better academic performance, improved graduation rates, and are more likely to attend college when taught by teachers of color. ***MetaSocratic Peer Tutoring*** addresses this need by preparing students academically and social-emotionally and providing critical exposure to careers in education.

C. High-quality Project Personnel

(1) Diversity, equity, and inclusion in hiring and program implementation

Both SDUSD and Thinkist are committed to hiring persons who have typically been underrepresented based on race, skin color, gender, age, or disability, and to serving students who are often underrepresented based on similar demographics. The Thinkist team is 50% POC and 50% female. Additionally, the Thinkist program model was developed based on the needs of a diverse population of students and can be customized for different groups based on their specific backgrounds and/or needs. This is important because research indicates that white teachers tend to discriminate against students of color, believing that Black students in particular

are less able to meet the academic standards set in the classroom.[21] ***MetaSocratic Peer Tutoring will establish a proven, replicable model that can to address these inequities.*** Please see **Appendix J.5** for a statement of Thinkist's Diversity, Equity, and Inclusion Plans.

(2) Relevant training and experience, of key project personnel

As the fiscal agent for this EIR grant initiative, SDUSD will assume ultimate responsibility for all aspects of the program, including recruiting and retaining students and schools, monitoring project fidelity, overseeing continuous improvement, and working with the independent evaluators.

All three organizations involved in this grant have a history of effective collaboration, and Thinkist and Copia are highly experienced in working with large districts with a high proportion of low-income, at-risk students such as SDUSD. Copia also brings significant expertise in interventions that have strong social emotional learning components, which should contribute to the project's success. Brief descriptions of background and qualifications follow:

The San Diego Unified School District Team

[redacted] ***Director, College, Career and Technical Education*** oversees implementation of high-quality college and career pathways at 25 secondary sites and 26 middle schools, serving over 20,000 students. She has developed innovative programs and partnerships to support student preparation for college and career and future success. The San Diego Unified School District offers pathways in 12 of the 15 state industry sectors and has focused on strengthening programs of study with early college credit transfer agreements.

[redacted] ***Director of Partnerships and Work Based Learning,*** oversees Partnerships and Work Based Learning opportunities for K-12 students and the Adult Education High School Diploma Program with the Office of College, Career, and Technical Education. Prior to joining

the Office of College, Career, and Technical Education [redacted] was an Elementary Principal, Middle School Vice Principal, and High School Teacher in San Diego Unified School District.

The Thinkist Team

[redacted] ***Thinkist CEO,*** is responsible for driving the Thinkist team toward its mission of bringing scalable peer tutoring to K-12 schools across the US. In 1994, he founded [redacted] which has provided over 200,000 hours of tutoring, test preparation, and educational counseling services to families in San Diego. In 1999, as Assessment Director, he worked on the co-founding team of educational leaders that built High Tech High, one of the nation's highest-profile charter school networks. In 2006, [redacted] co-founded LearnSpeed with Thinkist CTO [redacted] the first SaaS platform for education services companies.

[redacted] ***PhD, Thinkist Chief Education Officer,*** is responsible for ongoing development of the Thinkist MetaSocratic Peer Tutor Training and developing curriculum. [redacted] developed the foundation of the Thinkist curriculum while serving as a full professor of English, English language acquisition, and education at San Diego Mesa College, serving as the coordinator for the Mesa Tutoring and Computing Centers (MT2C) tutoring program and co-coordinator of the Teacher Education program. He co-founded the Learning Assistance Project, a statewide California community of practice focused on the professionalization of tutoring in higher education. He has published in multiple journals, including *The CATESOL Journal, The Chronicle of Mentoring and Coaching*, and the *Journal of College Academic Support Programs*.

Please see **Appendix B** for complete bios for these additional Thinkist team members:

- [redacted] ***Thinkist Director of People and Culture,*** leads Thinkist's diversity, equity, and inclusion work, both internally and externally.

- [redacted] ***Thinkist Chief Technology Officer,*** responsible for the ongoing development of technology which will allow Thinkist to bring efficient, impactful, and scalable peer tutoring to K-12 schools nationwide.
- [redacted] ***Thinkist Director of Operations,*** works to bridge program operations and the technology development team which will allow the peer tutoring program to scale while maintaining program impact and high participation satisfaction ratings.
- [redacted] ***Development Team Leader,*** is responsible for the continued development of the tutoring training and tutoring mentoring program, culminating in a train-the-trainer model that will allow Thinkist to grow peer tutoring programs across large school districts.

<u>The Copia Consulting Team</u>

Copia Consulting, LLC is a Historically Underutilized Business (HUB-certified), research and evaluation company, founded in 2002.

[redacted] holds a Master's degree in Education and has more than 30 years of experience working with youth via the justice, education, and various mental health systems. [redacted] has received extensive training in **qualitative research** practices and has served as the Principal Investigator on several of large evaluation projects, including two current EIR grants on track to be reviewed by the WWC.

[redacted] serves as Copia's lead **quantitative researcher** on EIR, MSAP, and CSP grant evaluation projects. She is experienced with both quasi-experimental and experimental designs in education, and emphasizes the importance of data quality, validity, and integrity in her work. [redacted] was selected to present to other evaluators during the most recent EIR conference on, "Complex Evaluations for Complex Program Designs". [redacted]

will work closely with the Thinkist team and SDUSD to ensure that necessary data are collected and to provide interim analyses to inform the development of the program.

D. High-quality Management Plan

The management plan will achieve project objectives on time and within budget and includes clearly defined responsibilities, timelines, and milestones

Fiscal agent **San Diego Unified School District (SDUSD)** has successfully managed and executed large, multi-year federal grants including 21st Century Community Learning Centers, Magnet School Assistance Program (MSAP), and Strengthening Career and Technical Education for the 21st Century Act (Perkins V), and the district's business office is adept at creating and submitting on-time and factual update reports to funding and philanthropic partners.

The following table illustrates the key **project management** activities, responsibilities, timelines, and milestones for this EIR project. **Items will repeat annually throughout the grant with the exception of items marked with an asterisk** (*) that are one-time activities. Following that is the timeline for data collection to measure progress toward project objectives and outcomes. (Note: Timeline reflects the *grant project quarters*, ex: Q1 – Jan. - March, etc.)

MAJOR PROJECT MANAGEMENT ACTIVITIES	POSITION(S)	TIMELINE
Announce notice of EIR grant award to SDUSD secondary schools and project partners*; designate Project Director (PD) to oversee EIR project	SDUSD Superintendent	Upon notice of funding/Q1
Designate internal Project Managers (PMs) from each project partner to be responsible for communication, implementation, compliance, and reporting related to this EIR initiative. *All PMs, together with the PD and external evaluators, constitute the Project Management Team (PMT).*	SDUSD PD; Thinkist CEO; Copia Consulting Managing Partner	Upon notice of funding/Q1
Meet with key stakeholders and evaluation team to review goals, objectives, activities, timelines, budget, and next steps.	PMT	Q1
Hire and onboard staff, as noted in budget.	SDUSD PD Thinkist CEO	Q1 & Q2
MILESTONE: Project Staffing Complete		
Establish data collection and reporting procedures, timelines, and methods.	PMT	Q1 and Q2

MAJOR PROJECT MANAGEMENT ACTIVITIES	POSITION(S)	TIMELINE
Establish baseline data from which progress will be measured. Update baseline demographics,	PMT, Copia	Q1 and Q2
Collect and review all documents related to the program interventions, trainings, etc.	Copia	Q1
Schedule initial site visits to SDUSD to observe tutoring in practice and to conduct interviews with key personnel.	Copia (PD supports)	Q2 and Q3
Ensure that the program is implemented as designed across all campuses.	SDUSD and Thinkist	Ongoing
Create annual reports based on both quantitative and qualitative data.	Copia (PD supports)	Annually
Make any changes to initial program design based on data collected.	Thinkist and SDUSD PD	Annually
Conduct data gathering for project evaluation	Copia leads; PMT supports	Ongoing
MILESTONE: Project Systems, Baselines, and Targets Established		
Consult with school teams and project partners/supporters to implement and actualize the project; recruit student tutors and tutees	SDUSD PD	Q1-Q4 each year
Manage program-related training each year in accordance with project timeline	PMT	Ongoing throughout project
Begin iteration and improvement of the LearnSpeed technology platform; prepare to operate at scale.	PD/project admin.	Q1-Q4 each year
Complete annual interim financial and management reports; share with stakeholders via board meetings	PD manages; SDUSD Supt. or designee reports to board	Q2, Q4 or as required each year
Disseminate results of EIR project to US Dept. of Education, regional and local stakeholders, education/ business/community partners, and others	SDUSD Supt/designee and PD; PMT supports	Q4 or as required each year
MILESTONE: *MetaSocratic Peer Tutoring* Complete; Targets Met		

We anticipate a start date of January 1, 2023, at which time SDUSD will designate the **Project Director** (PD) and work will commence. District responsibilities include deciding on requirements of peer tutor and tutee participation, identifying students to target, promoting the program through email communication with parents and students, and referral through counselors and teachers, and collaborating on ongoing demographic and outcomes data collection. Thinkist manages all other aspects of the program including registration, onboarding, scheduling, tutor training, administrative support, and reporting to the district. This model

provides an easy pathway to the implementation of a pilot program and the scaling of the program across a district.

Please see **Appendix J.6** for detailed information for ensuring **student safety**, using **technology** to scale effectively and efficiently, maintaining records through **session logs**, building and maintaining relationships with all stakeholders (parents, tutors, tutees), serving students at risk in an online program environment.

Bi-weekly meetings between and among the core stakeholders facilitate frequent communication between SDUSD, Thinkist, and Copia Consulting and will ensure critical feedback is gathered for program refinement and the maximal participant benefit.

E. High-quality Project Evaluation

(1) The methods of evaluation will meet WWC standards without reservations

An independent mixed-methods evaluation of MetaSocratic Tutors will be conducted by Copia Consulting (see **Appendix J.7**). Copia will conduct all key aspects of the evaluation, including random assignment, assessment of fidelity, ongoing formative feedback, analyses of outcomes, and reporting of study findings. Copia currently holds two EIR grants, and both are on track for review and inclusion in the WWC. **The study design and methods will meet WWC evidence standards *without reservations*.** The evaluation will include an impact, implementation, and exploratory analysis that will test factors that mediate the outcomes of interest. Impact Analysis Design: There will be two confirmatory impact studies. Study 1(Academic): What is the impact of the Thinkist program on academic achievement of tutors and tutees in Mathematics after one program semester? Study 2 (SEL): What is the impact of the Thinkist program on non-cognitive skills of tutors and tutees after one program semester? The hypothesized chain of causes, effects, and outcomes implies that the program will have an impact on tutees and tutors. Thus, both

studies will be conducted for each population separately [22]. Copia will test these questions using student-level blocked randomized controlled trial (RCT) with students from SDUSD's 25 high schools with CTE students (peer tutor population of 10th, 11th and 12th grade, 300 control, 300 treatment; academically behind student-tutee population of 9th, 10th, and 11th grade, 600 control, 600 treatment) to draw causal inferences about the effects of the project. The analytic approach will be to regress outcome measures on treatment/comparison indicators and individual covariates (socio-economic status, English language learner status, race/ethnicity, gender, and a pre-intervention baseline score in Math or SEL, respectively). Analytical Models: The researchers will use multilevel modeling to account for nesting of students in schools. (See **Appendix J.7** for model specifications.) Random Assignment: After students are recruited, they will be randomized within blocks (school and grade) to either the treatment or control group. Students in the treatment group will receive Level 1, while students in the control group will participate in business-as-usual, traditional math classes. By randomly assigning students within each site and grade, the treatment and control groups are expected to be equivalent on both observed and unobserved characteristics, and to differ only in their exposure to the program. For RCTs, WWC does not require establishing baseline equivalence across conditions. However, baseline conditions will be collected to safeguard against a situation where there is unexpected attrition or selection bias among participants. Attrition, Contamination, etc: The biggest threat to the validity of this study of a voluntary, extended-learning program is attrition on the part of the tutors and tutees. According to Thinkist, the management of attendance and participation is intensive; emails, phone calls to parents, discussions with teachers, etc. to ensure attendance remains high. Still, best practices will be in place to ensure baseline and outcome data can be collected regardless of whether or not tutors/tutees complete the program. For example, there

will be a detailed proctor guide for those conducting assessments, there will be ongoing communication about completion/non-completion, and frequent and targeted follow-up. If necessary, we will include incentives to curtail non-response. Using WWC conservative attrition standards, our assumption is 85% baseline/outcome completion with 5% differential attrition for both SEL and academic outcomes, which is based on prior experience with large-scale EIR studies. Though unexpected, weighting may be employed if differential attrition rates do not meet WWC standards.[23] We expect minimal contamination from treatment to control given that the program occurs after school, does not directly involve the training of teachers, and there are no other similar tutoring programs in place. However, staff will still be given guidance on how best to comply with the RCT design, crossovers and no-shows will be tracked closely, and both intent-to-treat and treatment-on-treated effects will be estimated. [24] Power Calculation: Based on the following assumptions, the study is powered to achieve the following minimum detectable effect sizes (MDES).

	MDES	
Study	**Tutors**	**Tutees**
Study 1 Academic Achievement (iReady)	0.232	0.19
Study 2 SEL (Panorama)	0.232	0.19

Each MDES assumes a Type I error of .05 at a power of 80% and is calculated using the appropriate fixed effects model where assignment is at the student level, with 40% of the variance in student outcomes explained by student covariates. The study is powered to detect small to medium effects. [25] Please see **Appendix J.7** for other assumptions and details pertaining

Measures and Timing of Outcome Data Collection				
Domain	**Measure**	**Reliability/Validity**	**Timing of Baseline**	**Timing of Outcome Data Collection**
Math Achievement	iReady	IRR>=.85 all grade levels above 5; Predictive validity=.8 grades above 5	Pre-intervention January 2024, January 2025, January 2026	Post intervention- May 2024, May 2025, May 2026
Social Emotional Learning	SEL constructs: Self-Efficacy in Math, Learning Strategies & Classroom Effort (provided by Panorama Education)	Cronbach's alpha>=.78 for all relevant constructs; Structural validity= <.07 for all relevant constructs		

to the power analysis. Valid and Reliable Measures: The confirmatory outcome measures are well known instruments, created independently of study authors and program developers. Both instruments have sound psychometric properties, and will be conducted for treatment and control students in the same window on a secure platform before and after the intervention in each year of the RCT.

Additional data to be used as covariates and in the exploratory analysis of mediating factors will be collected from SDUSD' data team. Additionally, for implementation fidelity information, the researchers will be given their own login information for the online platform.

(2) Performance feedback and periodic assessment of progress

Implementation Analysis: This mixed-methods evaluation will provide detailed information on the barriers to implementation and interim results of the proposed intervention in the first three years. (Years 4-5 will shift from providing formative feedback to identifying key components for success and sustainability.) The aim will be to make data-informed recommendations for refining the intervention, and to identify mediating relationships among variables. Qualitative research reports will be provided at the end of each semester.

Summary of Qualitative data collection methods (see **Appendix J.7** for further detail): (a) surveys of tutees, tutors, and tutor mentors, to be analyzed by subpopulation and the findings used to inform focus groups questions; (b) focus groups with tutors, tutees, and tutor mentors; interviews and with Thinkist staff, campus-based staff, and key SDUSD personnel to be coded to identify key themes; (c) observations of tutor training, tutoring, mentorship sessions, and staff meetings; (d) biweekly communication with project staff, project meetings, and other relevant individuals; and (e) on-going literature review of similar programs and best practices to guide and improve the program as it progresses.

Key project components, mediators, and outcomes, as well as a measurable threshold for acceptable implementation

Implementation Evaluation Framework: Copia will create a tool to assess the extent to which each component in the logic model meets the relevant dimensions of implementation fidelity: adherence, duration, quality, responsiveness, and differentiation.[26] After discussions with Thinkist regarding the pilot experience, t appropriate thresholds for implementation of the tutor program:

Key Component-Tutors	Threshold for Tutors	Threshold for Schools	Threshold for Sample	Source of Data
Implement Thinkist curriculum over one semester, 12 Weeks Level 1 14 Weeks Level 2	Tutors attend 90 percent of all Thinkist course meetings	95% of tutors in a school meet threshold	95% of schools meet threshold	Tutoring platform logs
Tutor completes post-session logs in tutoring platform	Each tutor creates a session log for 90 percent of possible tutoring sessions	95% of tutors from a school meet threshold	90% of schools meet threshold	Tutoring platform logs
Tutor receives 1:1 mentorship from expert tutor	90 percent of tutors have at least 3 1:1 session with a mentor per semester	90% of tutors from a school meet threshold	90% of schools meet threshold	Tutoring platform logs
Tutor completes 12, 1.5-hour tutoring sessions	Tutor completes 15 hours of tutoring	90% of tutors from a school meet threshold	90% of schools meet threshold	Tutoring platform logs

Fidelity measures will be expanded to include all program components in the logic model, and thresholds may be modified based on results from the pilot period. The inclusion of technology that has the capacity to capture most fidelity information in one place. Mediator Analysis: The mediator analysis will connect the implementation study with the impact study to shed light on the levers that SDUSD and Thinkist have to influence outcomes. Multi-level mediation analyses [27] will be applied to test how various mediating factors, such as the number of instructional hours a tutor receives, or tutor achievement/SEL results, mediate the outcomes of interest, e.g. tutee academic achievement and SEL gains. The researchers will also explore differences in outcomes for Level 2 vs. Level 1 tutors.

Evaluation Activities by Grant Year	
SY2023 (spring)	Grant Award; IRB Submission; Design Documentation; REES Entry
SY2023-SY2024	Pilot Effort; Implementation Study Commences; Fidelity Measures Development and Sensitivity Analysis
SY2024-SY2025	Implementation Study Continues; Spring RCT Year 1 (Tutors: 100 T/100 C; Tutees 200 T/200 C)
SY2025-SY2026	Implementation Study Continues; Spring RCT Year 2 (Tutors: 100 T/100 C; Tutees 200 T/200 C)
SY2026-SY2027	Implementation Study Concludes; Spring RCT Year 3 (Tutors: 100 T/100 C; Tutees 200 T/200 C)
SY2028 (fall)	Finalization of study results, preparation for publication

Summary of Evaluation Plan Parameters by Population of Interest		
	Tutees	**Tutors**
Intervention Components	12, 1.5 hours of online tutoring with near peer, Thinkist tutor	15-week MetaSocratic tutoring curriculum; 1:1 mentorship from tutor expert; routine assessments of progress towards learning objectives; 1.5 hours of tutoring for 12 weeks
Cohort, Year, Grades	3 cohorts, SY24-25, SY25-26, SY26-27; Grades 9-11	3 cohorts, SY24-25, SY25-26, SY26-27; Grade 10-12
Schools	25 High Schools	
Treatment/Comparison	600 treatment, 600 control; 1200 total	300 treatment,300 control; 600 total
Confirmatory Outcome and Baseline Pre-Test	ACADEMIC: iReady pre/post; SEL: Self Efficacy in Math, Learning Strategies, Classroom Effort constructs pre/post	
Individual Covariates	Socio-economic status, English language learner status, sped, gender, race/ethnicity,	
Statistical Analysis	Two level HLM (students nested in schools)	
Exploratory Analysis (Mediating Factors)	Tutor time (dosage); SEL outcomes of tutors; tutor grades	Thinkist training time; course grades in math, performance on rubric
MDES (Confirmatory)	Academic (.19) SEL (.19)	Academic (.23) SEL (.23)
*Each MDES accounts for expected attrition and Assumes Type I error of .05 at a power of 80% and is calculated using the appropriate 2 level HLM model where assignment is at the individual level. Please see the appendix for other assumptions about the power analysis.		

This evaluation will increase our understanding of how the Thinkist model can address the learning gaps for low-income, minority students by generating rigorous evidence on the implementation, effectiveness, scaling, and fidelity of the program. The inclusion of tutors as a subgroup in the study of academic learning and social emotional learning is an emerging area for study.[28] Furthermore, in the mediator analysis, this study will connect the experience of tutors to tutee achievement, which will go beyond an assessment of whether the program is working, and instead it will tell us about the levers that influence program outcomes.