

How are the Children? A Study of the Effectiveness of a Social-Emotional Learning Curriculum for High School Students

A REPORT OF A RANDOMIZED EXPERIMENT CONDUCTED IN THE ROCK ISLAND MILAN SCHOOL DISTRICT

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Chapter 1. Study Introduction and Background

In December 2022, Rock Island-Milan School District #41 (RIMSD), in partnership with the Connect with Kids Network (CWK) and Empirical Education, received an early-phase Education Innovation and Research (EIR) grant from the U.S. Department of Education. RIMSD contracted with Empirical Education to conduct a one-year teacher-level randomized control trial (RCT) and subsequent 4-year implementation study aimed at producing evidence of the effectiveness of *How Are the Children* (HATC) for 9–12 grade students on social-emotional (SE) competencies, as well as behavioral and academic outcomes. This report includes the results from the RCT that began in Rock Island High School (RIHS) in July 2023 and Thurgood Marshall Learning Center (TMLC) in January 2024.

MOTIVATION FOR PROGRAM DEVELOPMENT

HATC is a social-emotional learning (SEL) curriculum that uses project-based learning (PBL) modules to engage students in learning through documentary film making. The HATC curriculum includes lessons built around the five SE competencies identified by The Collaborative for Academic, Social, and Emotional Learning (CASEL): self-awareness, selfmanagement, responsible decision-making, social awareness, and relationship skills.¹ Building upon the Mutual Aid methodology (Gitterman, 2004) and the See-Feel-Change approach (Kotter & Cohen, 2012), CWK developed HATC for use in RIMSD. Although HATC is new curriculum, the U.S. Department of Education designated CWK as an "Effective Producer of Programs," and CWK prior work appears on the U.S. Department of Education's What Works Clearinghouse (Page & D'Agostino, 2005). Under the EIR grant, CWK developed HATC to demonstrate a new strategy and associated intervention—HATC curriculum—that builds on two existing evidence-based strategies: SEL and PBL. By braiding these strategies, HATC has the potential to increase knowledge of strategies that address two of our most urgent educational problems: 1) the deep inequities in access to, and engagement and success in curricula that increase social competence; and 2) the lack of SEL supports that amplify authentic learning.

"And how are the children?" is the traditional greeting of Maasai tribe warriors. The expression suggests that the true strength of a community is determined by the well-being of its children (Boutte & Bryan, 2019). For many, this is the single most important question to consider each and every day. As issues surrounding education are debated, priorities are set, and decisions are made, asking first and foremost "How are the children?" can guide toward a more just and thriving society.

So, how are the children? As it relates to both SEL and equity, the relationship between children's social and emotional health and academic success (both short- and long-term) is (1) a top priority for every parent, teacher, and school in the wake of the COVID-19 pandemic; (2) inextricably linked; and (3) well-documented (Taylor, et al., 2017). A growing research base shows that a focus on social and emotional development helps students build the skills and mindsets they use to acquire academic content, enhance their academic performance by developing academic tenacity and resilience, and develop cognitive and developmental skills that allow them to engage in the classroom (Durlak, et al., 2011). A focus on social and emotional development also promotes overall well-being (Reeves, et al., 2014) by promoting happiness, reducing mental health challenges like depression, promoting prosocial behaviors, and helping to become well-adjusted and able to persevere both in academics and in life (Stafford-Brizard, 2016).

Social and emotional support is particularly important for children who experience trauma or toxic stress, as these experiences can impair the development of cognitive, social, and emotional skills and mindsets, which in turn impact the

¹CASEL are leaders in the field of SEL. CASEL's five competencies are widely regarded as the standard within SEL practice and research (Cipriano et al., 2023).

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capacity for learning. Estimates say as many as 1 in 5 children experience a mental disorder in a given year and that approximately 79% of children aged 6–17 have an unmet need for mental health services (OECD, 2015). This situation is even more dire in low-income communities, exacerbating inequities. Living in poverty is a significant risk factor for mental health challenges. Poverty is often linked with other traumas and risk factors, such as housing instability and homelessness, food instability, poor nutrition, and lack of adequate health care. These identified risk factors disproportionately affect children of color and their mental health (Merikangas et al., 2010). Additionally, these inequities have been amplified due to COVID-19 and past and current racial tensions. In a recent nationally-representative survey of 13–19-year-olds, almost 40% reported a lower ability to concentrate, make decisions, and feel happy (Kataoka et al., 2002). Two-thirds of students from low-income households and of students of color reported feeling "depressed, stressed, or anxious" as the primary obstacle to learning (Alegria et al., 2010). This constellation of negative effects from societal inequities compounded by the COVID crisis creates an alarming predicament for our schools and teachers. It was under these conditions that RIMSD, CWK, and Empirical proposed to develop, test, and refine a program to support student SEL and build positive relationships within the classroom.

SETTING AND PARTNERSHIP

Two unique aspects of the study are the setting, RIMSD, and partnership established between RIMSD administrators, CWK, Empirical, and the implementing teachers. RIMSD, as the prime grantee and implementation site for this grant, presents a valuable opportunity for a high-needs community outside of a major metropolitan area to take the lead on refining an innovative SEL curriculum to address local needs. RIHS' principal called the grant a "game changer," emphasizing the critical importance of integrating SEL and mental health awareness into academic learning. Typically, projects like these are developed and evaluated in major metropolitan areas and then brought to smaller districts. As the recipients of this grant, RIMSD administrators and teachers have the unique opportunity to pioneer a new type of SEL curriculum that merges project-based learning with filmmaking and amplify the voices of its students in an authentic, meaningful, and creative way. Importantly, RIMSD has the opportunity to refine the curriculum to meet the unique needs of *their students*.

CURRENT STUDY

Our impact study addresses the following primary research questions.

- 1. Compared to the business-as-usual group, what is the impact of HATC on students in grades 9–12 on the following?
 - a) SE competence
 - b) school attendance
 - c) disciplinary referrals²

² Originally, we intended to assess impact on student suspensions. However, most students had zero suspensions, which might have led to an unreliable or unstable result. Therefore, we replaced suspensions with number of disciplinary referrals as a confirmatory outcome. Disciplinary referrals included more major infractions that lead to suspensions, as well as more minor behavioral incidents that HATC plausibly would prevent by engaging students in lessons that support SEL development and prosocial behaviors.

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We also address the following secondary questions.

- 2. Is there a positive impact of HATC on students' (a) *individual* SE competencies, or (b) academic achievement in mathematics and reading, as compared to the business-as-usual group?
- 3. When compared to the business-as-usual group, is there a differential impact of HATC on student outcomes based on baseline characteristics including gender, race/ethnicity, socioeconomic status, limited English proficiency (LEP) status, baseline number of disciplinary referrals (students), years of teacher experience, or teacher baseline SEL beliefs (teachers)?
- 4. When compared to business-as-usual group teachers, is there a positive impact of HATC on teachers' (a) relationships with students in the classroom environment, (b) SE competencies, (c) well-being, or (d) job satisfaction?

In addition to addressing these questions, this study documents how HATC was implemented and reports on teacher satisfaction with the program.

For this experimental study, recruitment occurred at two timepoints. In spring 2023, we worked with RIMSD to recruit 44 teachers from RIHS who would lead an advisory class during the 2023–24 school year. Advisory (sometimes referred to as homeroom) is a daily 25-minute class period that occurs across RIHS during sixth period. After collecting baseline data from teachers and about their students, we divided the 44 RIHS teachers into two groups: a group of teachers to be trained on and use HATC (i.e., the *HATC* group) and a group of teachers to continue with their existing advisory class (i.e., the control group or the business as usual (BAU) group). In fall 2023, we worked with RIMSD to recruit nine 9th–12th grade teachers from TMLC. This second site was added in order for the study to meet the Every Student Succeeds Act's (ESSA) evidence requirements, and to provide TMLC with access to the program. TMLC does not have an advisory period like RIHS, so TMLC teachers implemented HATC during their second block classes for approximately 20–25 minutes. As with the RIHS teachers, the nine TMLC teachers were divided into two groups: *HATC* or BAU.

In order to divide teachers, we first matched teachers and their advisory/second block classes to other similar cases. We used a random number generator to determine which teachers in each of the groups of matched teachers would join the *HATC* group and which teachers would be in the control group (i.e., technically, teachers were randomly assigned in blocks of similar teachers). Randomization in RIHS assigned 21 teachers to *HATC* and 23 teachers to the control group. At the beginning of the school year, one teacher in the control group left their teaching position for an administrative position, and another teacher in the *HATC* group withdrew from participation. By the end of the 2023–24 school year, there were 20 teachers in the *HATC* group and 22 in the control group. Randomization in TMLC assigned five teachers to *HATC* and four teachers to BAU. During the school year, a teacher in the BAU group left the district, bringing the final numbers to five *HATC* teachers and three BAU teachers. In total across both schools, 25 teachers implemented HATC and 25 teachers continued BAU.

An RCT attempts to eliminate a variety of biases that could otherwise compromise the validity of research. For example, it ensures that there is not an overrepresentation of teachers who are highly motivated in one group or the other (that is, in the program or BAU group). Random assignment to experimental conditions does not, however, assure that we can generalize the results beyond the district where the research was conducted. We designed our study to provide useful information that will support local decision-making by taking into account the specifics of district characteristics and details of local implementation. The results are not applicable to school districts with practices and populations different from those in this experiment. This report provides a rich description of the conditions of the implementation to provide the reader with an understanding of the context for our findings.

Chapter 2. Study Methodology

Our experiment results in a comparison of outcomes between students in advisory or second block classes (classes) where HATC was in place, and students in classes who experienced the schools' standard practices. The primary outcomes of interest for this study are student SE competencies, as measured by the DESSA-High School Edition (DESSA-HSE), school attendance, and number of disciplinary referrals. This section details the methods used to assess, at a specific level of confidence, the size of the difference in outcomes and whether use of HATC is responsible for those differences. We begin by affirming the independence of the impact evaluation. Then we provide a description and rationale for the experimental design and a specification of the research sites, program, data sources, and composition of the experimental groups.

INDEPENDENCE OF THE IMPACT EVALUATION

Empirical Education independently conducted all key aspects of the evaluation, including random assignment, collection of key outcomes data (other than from administrative records), analyses, and reporting of study findings. The findings included in the final report were not subject to the approval of the project director or staff conceptualizing/implementing the intervention. In July 2024, we uploaded our study plan—including a description of the intervention, confirmatory and exploratory research questions, and planned analyses—to the Registry of Efficacy and Effectiveness Studies (REES).

EXPERIMENTAL DESIGN

There is always a level of uncertainty in estimates of the effects of a program. Our design attempts to efficiently deploy the available resources to reduce this uncertainty and maximize precision in the measurement of results. The design of the experiment determines the levels of random variability in outcomes across teachers and students (i.e., the *noise* not attributable to the program). We attempt to detect any program impact (i.e., the *signal*) by dampening the random variation and boosting the signal.

First, before beginning the experiment, we specify the research questions, the study design, and the estimated effects that will address the questions. This includes average impacts, as well as differential effects of the program. By stating these things up front, we avoid 'fishing' for results in the data, a process that can lead to mistaking chance effects for real differences. We can certainly pose additional questions and explore the data after the fact, but this is useful mainly for generating ideas about how the new program worked; that is, as hypothesis-generating efforts for motivating a future study, rather than as efforts from which we make firm conclusions from our existing study.

Second, an experimental design includes a determination of how large the study should be—in terms of units, such as students, teachers, or schools—in order to get to the desired level of confidence in the results. In the planning stage of the experiment, we calculate either how many cases we need to detect an effect of a certain magnitude, or how big an effect we can detect given the sample sizes that are available. Technically, this is called a power analysis. We will explain several aspects of the design and how they influence the sample size needs for the experiment below.

How We Identified the Sample

How we choose the participants for the study largely determines how widely the results can be generalized. In this case, CWK had a pre-existing relationship with RIMSD. Excited by the opportunity to lead a study in their district, RIMSD agreed to serve as project lead and identified RIHS as the initial site for the study. Together, the three partners submitted the proposal to EIR in summer 2022, and the grant was awarded in December 2022. When it was awarded, we signed a district agreement with RIMSD—which outlines the study methodology and the data that would be collected—and RIMSD signed a memorandum of understanding with CWK. We then held "kick-off" meetings with CWK and the district point of contact (POC) to initiate the project and to further review the implementation and research requirements.

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In March 2023, RIMSD, CWK, and Empirical Education held four informational sessions for teachers at RIHS. We invited all teachers to attend informational sessions and compensated them for their attendance. At the time of recruitment, RIHS had about 100 total teachers. During the webinar, RIMSD provided a short overview about the grant, and CWK described the curriculum. We (Empirical) provided information about study participation so that teachers could make an informed decision about joining the study. After the webinar, we emailed teachers a link to a consent form and baseline survey. Ninety-two teachers completed the informed consent document. Of those 92 teachers, 48 agreed to participate in the survey. To participate in the study, teachers needed to have an advisory class for the 2023–24 school year. After applying this exclusionary criteria, 44 teachers remained in the sample. After obtaining the list of participating teachers, we submitted a data request to collect student baseline data.

In order to meet ESSA Tier 1 standards for strong or moderate evidence, a study must include two research sites. To meet this requirement, we added TMLC, the 7th–12th grade referral school in RIMSD, to the study in fall 2023. We held two informational webinars for 9th–12th grade teachers in November 2023. During the webinar, RIMSD provided a short overview about the grant, and CWK described the consolidated curriculum that TMLC teachers would be implementing. We provided information about study participation so that teachers could make an informed decision about joining the study. After attending the webinar, we emailed teachers a link to a consent form and baseline survey. At the time of recruitment, TMLC had ten teachers in 9th–12th grade. Nine teachers completed the informed consent document and agreed to participate in the study. After obtaining the list of participating teachers, we submitted a data request to collect student baseline data.

Randomization

Our goal is to determine whether HATC caused a difference in outcomes. To do so, we have to isolate its effect from all the other factors influencing performance. Randomization ensures that characteristics (other than the program) that affect the outcome are, on average, evenly distributed between the program and control groups. By evening out the effects of these factors between conditions, we arrive at an accurate estimate of the program effect (i.e., technically referred to as an unbiased estimate). Any remaining departures from the true values of the effects are due to chance differences between conditions, not because of any systematic differences between the randomized groups in their composition.

We generally determine the level in the education system at which we conduct the randomization by the type of program we are studying. We attempt to identify the lowest level (e.g., school, teacher, or student) at which the program implementation can occur without unduly disrupting normal processes or inviting sharing or contamination between control and program units. For example, school-wide reforms call for a school-level randomization, while a professional development program can use a teacher-level randomization. For this experiment, we randomized teachers who volunteered for participation to the *HATC* and control group. Because we assigned teachers, instead of students, to *HATC* or control, we call this kind of experiment a group randomized trial.

Randomization was blocked on school. Among the 53 teachers randomized, post-study outcomes from students on the original baseline rosters of those teachers were available for all 53 teachers for absences and disciplinary referrals, and for 52 teachers for DESSA scores (27 control and 25 HATC). This marks very low attrition from the study for analysis of the main (confirmatory) impacts on student outcomes. We present the demographics of the randomized sample of teachers below (Table 1).

TABLE 1. DEMOGRAPHICS OF RANDOMIZED TEACHERS

| Characteristic | НАТС | BAU | Total |
|---|------|-----|-------|
| School | | | |
| Rock Island High School | 21 | 23 | 44 |
| Thurgood Marshall Learning Center | 5 | 4 | 9 |
| Teachers assigned to condition | 26 | 27 | 53 |
| Teacher gender | | | |
| Male | 14 | 14 | 28 |
| Female | 12 | 13 | 25 |
| Teacher race/ethnicity ^a | | | |
| Asian | 1 | 0 | 1 |
| Black or African American | 7 | 5 | 12 |
| White | 19 | 24 | 43 |
| Hispanic, Latine/o/a/x or Spanish origin | 0 | 1 | 1 |
| Position | | | |
| ELL Teacher | 2 | 1 | 3 |
| General education teacher | 17 | 20 | 37 |
| Special education teacher | 5 | 5 | 10 |
| Other ^b | 2 | 1 | 3 |
| Highest level of education | | | |
| Bachelor's degree | 8 | 6 | 14 |
| Master's degree | 17 | 20 | 37 |
| Doctorate or professional degree | 1 | 1 | 2 |
| Teaching certificate | | | |
| Professional Educator License | 23 | 25 | 48 |
| Educator License with Stipulations/Career and Technical Education | 2 | 2 | 4 |
| Years of experience | | | |
| 0-3 years | 3 | 2 | 5 |
| 4-9 years | 5 | 3 | 8 |
| 10-20 years | 10 | 13 | 23 |
| 21+ years | 8 | 9 | 17 |

^a Teachers were instructed to select all that apply from categories including: Asian, Black or African American, Hispanic or Latine/o/a/x or Spanish Origin of any race, Native American or Alaskan Native (n = 0), Native Hawaiian or Pacific Islander (n = 0), Middle Eastern or North African (n = 0), White, and/or additional race/ethnicity category/identify not listed (n = 0).

^b Other includes alternative educator teacher, interventionist, and certified nursing assistant (overseeing the Basic Nursing Assistant Program).

Note. n = 53. One response is missing from teaching certificate (n = 52).

What Factors May Moderate the Impact of HATC?

The study design allows us to measure the differential effectiveness of HATC for specific groups of students or teachers. The groups are identified before the experiment started, and there is interest in whether the effect of HATC varies across them. Technically, because the groups can moderate (increase or decrease) impact, the variables that specify group membership are called "moderators". We measure the effect of the interaction between each potential moderator and the variable indicating assignment (i.e., to *HATC* or control); that is, we measure whether the effect of HATC changes across levels of each moderator.

For this study, we compared the program's effectiveness on certain outcomes based on student-level moderators (gender, race/ethnicity, socioeconomic status, LEP status, and baseline number of disciplinary referrals), as well as teacher-level moderators (years of experience and baseline SEL beliefs). We chose these particular moderators because these student groups are of interest to RIMSD based on historically observed group differences and their priority to close access and opportunity gaps. We decided to look at teacher experience because the literature suggests a teacher's mastery and effectiveness is related to their years of teaching experience (Graham et al., 2020).

SITE AND PROGRAM DESCRIPTION

Rock Island Milan School District

RIMSD is located in Rock Island, Illinois. Rock Island is a small, suburban city located approximately 175 miles west of Chicago. The city's total population is 37,108 (United States Census Bureau, 2020). RIMSD's total district expenditures were \$105,850,961 in the 2023-24 school year, and the per-pupil expenditure was \$14,456 (Illinois State Board of Education, 2024). RIMSD has 13 schools with a total enrollment of 6,124 students (Illinois State Board of Education, 2024). Table 2 provides information about the entire district, including both schools, RIHS and TMLC, that participated in the study.

Rock Island High School

RIHS, or "Rocky" as it is known to its students, is a four-year public high school. In the 2023–24 school year, RIHS served approximately 1,700 students in grades 9–12. Each day at RIHS is made up of seven class periods, including a 25-minute advisory period during which HATC was implemented. RIHS serves large numbers of students representing populations at disproportionate risk for poor academic outcomes, including exclusionary discipline practices. RIMSD has identified key issues affecting their educators and student body including high suspension rates (reaching 13% in 2018), low reading and mathematics achievement scores, and chronic absenteeism. District administrators have also expressed great concern that students of color have been disproportionately affected by suspensions. The district has made efforts to address these issues, including increasing counseling staff at the high school, focusing on improving data collection and implementing more consistent practices to track progress.

Thurgood Marshall Learning Center

TMLC is the referral school for RIMSD. Currently, the school serves approximately 100 students in grades 7–12 in an alternative school setting. As an alternative school setting, TMLC serves students with a variety of academic and social needs. This includes students who are at risk of academic failure or dropping out of school, students in self-contained special education classes, students who have been suspended or expelled from the traditional high school, and students facing significant social trauma, including homelessness, housing and food insecurity, teenage parenthood, and those impacted by the juvenile justice system. TMLC offers a more flexible learning environment, with more one-on-one interaction with educators, and curriculum resources designed to support and meet the specific needs of the students being served.

Each day at TMLC is made up of four 90-minute periods. TMLC teachers implemented HATC using a 20-25 minute portion of their second block class.

| Demographics | | | | | | |
|---|-----------|--|--|--|--|--|
| Total schools | 13 | | | | | |
| Total full-time equivalent teachers | 411 | | | | | |
| Student to teacher ratio ^a | 21:1 | | | | | |
| Student population | 6,124 | | | | | |
| English language learners | 14% | | | | | |
| Students with IEPs ^b | 19% | | | | | |
| Low socioeconomic status | 60% | | | | | |
| Race/Ethnicity | | | | | | |
| White | 35% | | | | | |
| Black | 33% | | | | | |
| Hispanic | 15% | | | | | |
| Asian | 7% | | | | | |
| Pacific Islander | <1% | | | | | |
| American Indian/Native Alaskan | <1% | | | | | |
| Multiracial/No response | 9% | | | | | |
| ^a Ratio of high school students per teacher | | | | | | |
| ^b IEPs are Individualized Education Programs | | | | | | |
| Source: Illinois State Board of Education (2024) | | | | | | |
| Note. Percentages may not add up to 100% due to rounding of | decimals. | | | | | |

TABLE 2. DEMOGRAPHICS OF ROCK ISLAND MILAN SCHOOL DISTRICT

How Are the Children Curriculum and Training Description

CWK designed HATC to be a year-long curriculum, implemented four to five days per week for 20–25 minutes during students' advisory period. During the 2023–24 school year, 20 RIHS teachers implemented the year-long curriculum in their advisories, and five TMLC teachers implemented a consolidated half-year curriculum during their second block (see Appendix A for HATC scope and sequence). Both the full and consolidated curriculum consist of overarching units that are broken down into four to five lessons made up of individual, small-group, and full class activities and instruction. Each unit aligns with a part of the documentary film making process (e.g., storytelling, pre-productions) explored through an SE lens. Between units, students engaged in PBL breaks during which they learn about documentary film making. The curriculum culminated in a capstone project: a student created documentary film. We provide additional details about implementation in <u>Chapter 3</u>.

For RIHS, training occurred over two days—about 12 hours in total—in July, prior to the start of the academic year. TMLC teachers participated in training over four sessions—eight hours in total—in December, prior to the start of implementation in the spring semester. RIHS teachers received access to all lesson materials (e.g., PowerPoint slides,

videos) through the online portal of curriculum/resources. TMLC teachers received access to the consolidated curriculum via PDFs with embedded links to videos and materials.

CWK provided ongoing technical support through the virtual helpdesk hosted on the online portal and through quarterly (RIHS) and monthly (TMLC) feedback and reflection sessions attended by teachers, Empirical Education researchers, and RIMSD administrators. As documentary filming ramped up, CWK offered virtual sessions with production staff for teachers and students to attend.

In collaboration with CWK and RIMSD, we created a program logic model that we included in the original EIR grant submission to the U.S. Department of Education. After receiving the grant, we began attending monthly meetings with our assigned EIR evaluation technical assistance (TA) provider. Through discussions in these meetings and participation in an EIR-led TA webinar, we updated the logic model to reflect EIR expectations. One change was to consolidate program inputs and activities (column 1) to better fit EIR's preference for the structure of key components. In our original logic model, we presented inputs and activities separately. Our TA provider described key components as the elements of a given project that are required for a replication of the project. Essentially, what would another team need to know to implement HATC in their school district? Key components also form the basis for fidelity of implementation (FOI), which we describe in more depth in <u>Chapter 3</u> of this report. As such, we combined our inputs and activities into one section of the logic model. We also clarified our proposed implementation and intermediate outcomes (column 2) to better align with identified student outcomes. Figure 1 is our updated logic model.

Goals: (1) When CWK SEL Curriculum encompassed with Project Based Learning components are implemented students will demonstrate positive effects with increased social emotional competence. (2) When CWK SEL Curriculum encompassed with Project Based Learning components are implemented students will demonstrate improved behavioral and academic outcomes.

| Program Model | | Mediators | | Outcomes Short-/Medium-Term Longer-Term | | | | |
|---|---|-------------------------------|--|---|--|--|--|--|
| Key Components (Support Components) | Direct Components (Core Activities) | | Educator-level | Studen | t-level | | | |
| Teacher professional learning Initial teacher training): Modules, | Teachers implement SEL lessons and PBL modules during advisory/second block | Educat relation environ | ors improve positive nships in the classroom nment | Increased student SEL competence | Increased on time graduation | | | |
| processes and content developed and facilitated by CWKStudents use knowledge from SEI lessons and PBL modules to create a documentary about a topic of interestQuarterly coaching and ongoing technical assistance: Provided by CWK to implementing teachers to support curriculum implementation and multi-media PBL componentStudents use knowledge from SEI lessons and PBL modules to create a documentary about a topic of interest | Educat | tors increase their wellbeing | Decreased # of disciplinary referrals | Greater academic achievement | | | | |
| | a documentary about a topic of interest | Educat | ors demonstrate improved | Reduced rates of suspension | Increased prosocial behaviors | | | |
| <u>How Are the Children (HATC)</u> <u>Curriculum</u> | <u>e the Children (HATC)</u> um | | mpetencies | Increased rates of attendance | | | | |
| SEL units and project-based learning (PBL) modules: Provides video | | Educat satisfac | ors feel increased job tion | School-level | | | | |
| modeling, group discussion, written productivity, and weekly reinforcement of SEL competencies with follow up activities. Multi-media | | | | Improved capacity to scale SEL curriculum internally | Improved school climate | | | |
| film-making hardware and software components for PBL. Available in an online portal | | | | and externally | Reduced rate of disproportionate suspension based on priority groups | | | |
| As Sufficient access to technology (e.g., 1 Advisory /second block time set for 0 | ssumptions :1 devices and appropriate bandwidth) CWK implementation | | Instructional time and space Educators' philosophy/experien | External Factors School s ce with SEL competencies | system policy changes | | | |

FIGURE 1. HOW ARE THE CHILDREN PROGRAM LOGIC MODEL

Training for HATC Teachers

RIHS teachers participated in two days of in-person or virtual training led by CWK in July/August 2023. Training included an overview of SEL, an introduction to the curriculum and the online portal of curriculum/resources, and a hands-on demonstration of the film kits. Most participating teachers (18 of 20 or 90%) attended both days of training, either in person or virtually. All 20 teachers attended at least one day of training (in person or virtual). For those unable to make the in-person sessions, CWK held virtual make-up sessions. Virtual training took place over Zoom. An RIMSD administrator attended both of the virtual training sessions. Virtual training used the same agenda as in-person training, with modified activities to account for teachers participating in the training independently rather than in the same room. Teachers received compensation from RIMSD for their participation in training.

TMLC teachers participated in four half days of virtual training led by CWK and held afterschool in December 2023. This training also included an overview of SEL, an introduction to the curriculum and the curriculum/resources, and a handson demonstration of the film kits. All participating teachers (5 of 5 or 100%) attended all four half-days of training. Teachers received compensation from RIMSD for their participation in training.

Feedback and Reflection Sessions

In addition to summer training, CWK also held (a) quarterly feedback and reflection sessions, (b) a morning session and an afternoon session for RIHS teachers, and (c) monthly sessions, after school, for TMLC teachers. Due to school breaks, CWK was unable to hold four sessions for TMLC, as was planned. Instead, they held three formal sessions and encouraged teachers to set up meetings with CWK for additional support. During these sessions, teachers described their progress through the curriculum and provided feedback on their successes and challenges while implementing the curriculum. Typically, CWK prepared a brief list of questions to guide the discussion or provided an article for teachers to read and reflect on. Teachers primarily used the space to talk about concerns they had with the curriculum. At RIHS, difficulty with student engagement emerged as a key theme. As filming progressed, concerns about developing topics, using the cameras, and editing become the most common topics of discussion for both RIHS and TMLC teachers.

| Feedback and Reflection Session | Date | Attendance |
|---------------------------------|----------------|----------------|
| Session 1 | September 2023 | 11 of 20 (55%) |
| Session 2 | December 2023 | 10 of 20 (50%) |
| Session 3 | February 2024 | 10 of 20 (50%) |
| Session 4 | May 2024 | 6 of 20 (30%) |
| | | |

TABLE 3. RIHS FEEDBACK AND REFLECTION SESSION ATTENDANCE

TABLE 4. TMLC FEEDBACK AND REFLECTION SESSION ATTENDANCE

| Feedback and Reflection Session | Date | Attendance |
|---------------------------------|---------------|--------------|
| Session 1 | February 2024 | 4 of 5 (80%) |
| Session 2 | April 2024 | 4 of 5 (80%) |
| Session 3 | May 2024 | 3 of 5 (60%) |
| | | |

Virtual Sessions with Production Team

As the content of the curriculum became more focused on film production, teachers requested additional support from CWK. In response, CWK began offering virtual sessions with the CWK production team twice a week (on Mondays and Thursdays) in February, March, and April. These drop-in sessions were open to teachers and students and focused on film production strategies like developing a topic, recording B-roll, editing, etc. At RIHS, these sessions were meant to replace teacher instruction two days per week. In between sessions, it was expected that students would work on their documentaries. In April, as filming ramped up for TMLC teachers and students, CWK invited TMLC to participate in two virtual sessions with the production team.

How Are the Children Materials

Participating RIHS teachers accessed all HATC materials through the online portal created by CWK. The online portal hosts educator resources, student resources, additional resources, and a virtual helpdesk. Due to timing, CWK was unable to update the online portal with the consolidated curriculum materials for TMLC teachers. Instead, TMLC teachers received the curriculum materials in PDF and PowerPoint formats with embedded links to access materials, activities, and videos. Each unit within the curriculum includes a teacher's guide that provided a breakdown of each lesson within the unit. CWK provided teachers with a student workbook that students access via Google Classroom. In addition, CWK created PowerPoint slides for each lesson. Each PowerPoint lesson includes essential questions, embedded videos, student activities, and reflection prompts.

All participating teachers also received film kits for their students' use. Each film kit contains an iPad, audio equipment, a tripod, lights, a micro-USB, and cables for charging and connecting the iPad to laptops. Each iPad was preloaded with the necessary video recording and editing software.

Control Materials

Teachers assigned to the control group continued their typical instruction during implementation. At RIHS, HATC implementation took place during advisory period. According to RIMSD administrators, typical activities that occur during advisory period include reviewing course grades with students, providing academic support, completing district or school-wide surveys, and implementing specific SEL lessons (not HATC) created by school administrators or counselors. In quarterly surveys (described in a future section), the 22 teachers assigned to BAU reported the frequency with which they engaged in typical activities and any other activities they participated in during advisory.

At TMLC, HATC implementation occurred during a portion of second block. Second block is a 90-minute instructional period. The four teachers assigned to BAU continued their typical instruction during second block. Courses that occurred during second block included the following.

- Federal Government
- Creative Writing
- Art
- Special Education Government
- Mathematics
- World Studies / Current Events

- Physical Science
- Business
- Technical Mathematics

Expectations for Implementation

CWK designed HATC to be a year-long curriculum, implemented four to five days per week for 20–25 minutes during students' advisory period. When implementation began at RIHS, FOI thresholds expected teachers to meet these implementation goals for the year. However, early in implementation, teachers, students, and parents raised concerns that students were missing out on Pride Time. At RIHS, Pride Time occurs three days per week during advisory. Pride Time gives students an opportunity to receive additional academic support outside of their advisory classroom. Students use an online scheduling system to sign up to attend Pride Time with their chosen teacher. Due to this feedback, *HATC* teachers received permission in September 2023 to hold Pride Time once per week and to implement HATC four days per week instead of five for the remainder of the implementation year. This allowed students in participating advisories to participate in Pride Time and allowed students not in participating advisories access to *HATC* teachers during Pride Time.

At TMLC, *HATC* teachers received a consolidated curriculum that was implemented over the course of one semester rather than the full year. CWK instructed teachers to implement HATC five days per week for 20–25 minutes during their second block. Teachers were not instructed at what time during the 90-minute block they needed to implement (e.g., at the beginning of the period or the end); instead, CWK advised teachers to implement whenever worked best with their instructional flow.

CWK held feedback and reflection sessions and expected *HATC* teachers to attend. Sessions for RIHS were quarterly. Teachers had the option of attending a morning or an afternoon session. Sessions for TMLC were monthly, directly after school.

Fidelity of Implementation

The U.S. Department of Education requires that all EIR grantees (1) establish key components for FOI, based on the program's logic model, (2) collect data on these components, and (3) ultimately report on whether each of the key components met fidelity. We collected FOI data from participant surveys and program administrative data (e.g., training sign-in sheets). The fidelity matrix lists the key program components, indicators of levels of FOI for each component, thresholds for reaching fidelity, and the formulas for calculating FOI per key component. Creation of both the HATC logic model and fidelity matrix was a joint effort between RIMSD and our researchers during the first year of implementation. As with other EIR development projects, we expect program components to change each year. Throughout the project, we will continue to work with RIMSD and CWK to adjust the program logic model and fidelity matrix as needed. In the matrix below (Table 5), we share the FOI data from Year 1 (2023–24). The full-length fidelity matrix is in Appendix B.

For this project, we identified two key components each of which have two indicators. We identified teacher professional learning as key component 1 with attendance at initial teacher training and attendance at feedback and reflection sessions (i.e., periodic teacher coaching) as indicators. We set two thresholds for component 1 at the school level and the program level. We identified provision of the HATC curriculum as key component 2 with provision of SEL resources and provision of PBL resources as indicators. For component 2, the threshold is measured at the program level.

EFFECTIVENESS OF HATC CURRICULUM

To meet the school-level threshold for teacher professional learning – initial teacher training (component 1, indicator 1), 80% of teachers at RIHS need to attend both days of their summer training and 60% of teachers from TMLC need to attend all four days of their initial training. To meet the threshold for teacher professional learning – periodic teacher coaching (component 1, indicator 2), 80% of teachers at RIHS need to attend three to four feedback and reflection sessions and 60% of teachers from TMLC need to attend two to three feedback and reflection sessions ³. To meet the program-level threshold for component 1, RIHS and TMLC need to meet the school-level thresholds for *both* indicators 1 and 2. In practice this means that in order to meet the program-level threshold, 80% of RIHS teachers will attend both days of summer training and three to four feedback and reflection session and 60% of TMLC teachers will attend all four days of their initial training and two to three feedback and reflection sessions.

To meet the threshold for provision of the HATC curriculum - provision of SEL resources (component 2, indicator 1), all participating teachers at RIHS and TMLC need to receive the SEL resources from the curriculum. To meet the threshold for provision of the HATC curriculum - provision of PBL resources (component 2, indicator 2), all participating teachers at RIHS and TMLC need to receive the PBL resources from the curriculum. To meet the program-level threshold for component 2, RIHS and TMLC need to meet the school-level thresholds for both indicators 1 and 2. This means that all participating teachers at RIHS and TMLC need to have received the SEL and PBL resources from the curriculum.

³ Originally, the threshold at Thurgood Marshall Learning Center (TMLC) was set to 60% of participating TMLC teachers attend three to four sessions. However, due to the consolidated implementation at TMLC, the smaller number of participating teachers, and the teachers' engagement in feedback and reflection sessions, CWK only held three sessions for TMLC teachers. As such, we adjusted the threshold to reflect the fewer number of sessions that TMLC had available to attend.

TABLE 5. FIDELITY OF IMPLEMENTATION MATRIX FOR YEAR 1

| Component | Indicator | School-Level Threshold | Program-Level Threshold |
|--------------------------|--|--|---|
| Teebar | Initial teacher training 2: attends all days 1: attends half only 0: attends no training | RIHS 1: 80% HATC teachers have score of 2 0: <80% HATC teachers have score of 2 TMLC 1: 60% HATC teachers have score of 2 0: <60% HATC teachers have score of 2 | RIHS 2: School has score of 1 on both component indicators 1: School has score of 1 on only 1 component indicator 0: School has score of 1 on 0 component indicators TMLC 2: School has score of 1 on both |
| Professional Learning | RIHS Periodic teacher coaching 2: attends 3-4 sessions 1: attends 1-2 sessions 0: attends 0 sessions <u>TMLC</u> Periodic teacher coaching 2: attends 2-3 sessions 1: attends 1 session 0: attends 0 sessions | RIHS 1: 80% HATC teachers have score of 2 0: <80% HATC teachers have score of 2 TMLC 1: 60% HATC teachers have score of 2 0: <60% HATC teachers have score of 2 | component indicators 1: School has score of 1 on only 1 component indicator 0: School has score of 1 on 0 component indicators Threshold for adequate implementation at program level = at least 50% of schools have a score of 2 |

TABLE 5. FIDELITY OF IMPLEMENTATION MATRIX FOR YEAR 1

| Component | Indicator | School-Level Threshold | Program-Level Threshold |
|-----------------|--|------------------------|---|
| | <u>Provision of SEL resources</u> 1: Provided all participating teachers with SEL resource access 0: Did not provide all participating teachers with SEL resource access | RIHS = 1 TMLC = 1 | RIHS 2: School has score of 1 on both component indicators 1: School has score of 1 on only 1 component indicator 0: School has score of 1 on 0 component indicators |
| HATC Curriculum | Provision of PBL resources 1: Provided all participating teachers with PBL resource access 0: Did not provide all participating teachers with PBL resource access | RIHS = 1 TMLC = 1 | TMLC 2: School has score of 1 on both component indicators 1: School has score of 1 on only 1 component indicator 0: School has score of 1 on 0 component indicators Threshold for adequate implementation at program level = a score of 2 |

Schedule of Major Milestones

Table 6 lists the major milestones in this study and associated dates.

TABLE 6. RESEARCH MILESTONES

| Date | RIHS Milestone | TMLC Milestone | | | | | | |
|----------------|---|---|--|--|--|--|--|--|
| | Attend the in-person EIR kickoff meeting in DC | | | | | | | |
| January 2023 | Start Year 1 | | | | | | | |
| | Obtain district agreement | | | | | | | |
| | Conduct RIHS teacher informational sessions | | | | | | | |
| | RIHS teachers consent to study and complete baseline | | | | | | | |
| March–May 2023 | survey | | | | | | | |
| | Deliver Quarter 1 report | | | | | | | |
| | Collect RIHS advisory rosters for the 2023–24 school year | | | | | | | |
| | Conduct randomization and inform RIHS teachers of result | c | | | | | | |
| | Propage and share initial draft of study plan with FIP | 5 | | | | | | |
| June 2023 | evaluation technical assistance team | | | | | | | |
| | Deliver Quarter 2 report | | | | | | | |
| July 2023 | Observe RIHS teacher 2-day training | | | | | | | |
| Santambar 2023 | Deploy 1st quarterly survey for RIHS teachers | | | | | | | |
| September 2023 | Deliver Quarter 3 report | | | | | | | |
| November 2023 | | TMLC teacher informational sessions | | | | | | |
| | | TMLC teachers consent to study and complete baseline survey | | | | | | |
| | | Collect TMLC rosters for spring 2023–24 | | | | | | |
| D | Deploy 2 nd quarterly survey for RIHS teachers | school year and student demographics | | | | | | |
| December 2023 | Deliver Interim Report | Conduct randomization and inform TMLC | | | | | | |
| | | Observe TMLC teacher 3-day training | | | | | | |
| | Start Year | 2 | | | | | | |
| January 2024 | Prepare and share final ver | sion of study plan | | | | | | |
| Echnicany 2024 | Attend EIR Project Directors ar | nd Evaluators Meeting | | | | | | |
| February 2024 | | Deploy 1^{st} monthly survey for TMLC teachers | | | | | | |
| March 2024 | Deploy 3 rd quarterly survey for RIHS teachers | Deploy 2 nd monthly survey for TMLC teachers | | | | | | |
| | Deliver Quarter | 1 report | | | | | | |
| April 2024 | | Deploy 3 rd monthly survey for TMLC teachers | | | | | | |
| | Conduct teacher i | nterviews | | | | | | |
| May 2024 | Deploy 4 th quarterly survey for RIHS teachers | Deploy 4 th monthly survey for TMLC teachers | | | | | | |
| June 2024 | Deliver honorariums for teacher participants w | ho completed surveys and interviews | | | | | | |
| | Deliver Quarter 2 | Deliver Quarter 2 report | | | | | | |

DATA SOURCES AND COLLECTION

The data we collected from RIMSD for this study include demographic, behavioral, and assessment data (from the DESSA-HSE and The Northwest Evaluation Association (NWEA) Measures of Academic Progress (MAP). The data we collected through surveys and interviews include program implementation information. We also collect implementation data (e.g., sign-in sheets from training) from RIMSD for tracking FOI. In addition, we have reviewed various program documents and materials from CWK.

Class Rosters and Demographic Data

For each school, we submitted two data requests: one at the beginning of the year and one at the end of year. We requested and collected RIHS student demographics, behavior information, and attendance from the RIMSD in April 2023 and July 2024. We requested TMLC's student demographics, behavior information, and attendance in November 2023 and July 2024.

We also requested classroom rosters for RIHS advisory and TMLC second block for the 2023–24 school year. For RIHS, we received initial advisory rosters in May 2023 and updated rosters (10-day counts) in August 2023. For TMLC, we received initial second block rosters in December 2023 and updated rosters (10-day counts) in January 2024. For both TMLC and RIHS, we received end-of-year rosters in April 2024 to coincide with the DESSA spring data collection.

These data are required to conduct randomization, balance checks (e.g., establish baseline equivalence), and conduct moderator and mediator analyses. Specifically, we asked the district to provide the following student data.

- Name
- Date of birth
- Student ID
- Student information number
- Grade
- Gender
- Race
- Ethnicity
- English proficiency status
- Fee waiver ⁴
- Special education
- Disability status

⁴ Indicates that the student has an approved fee waiver for textbooks and instructional materials, based on their family's socioeconomic status, including if the student is from a low-income household, if the student is homeless, and other extenuating circumstances.

- In-school and out-of-school suspensions
- Disciplinary referrals
- Days absent
- Days chronically absent ⁵
- Days chronically truant ⁶
- Days enrolled

Upon receipt of student and teacher data, we scanned it for individually identifying characteristics. We then stripped all such identifiers from the data and stored it using security procedures consistent with the provisions of the Family Educational Rights and Privacy Act (FERPA). This experiment falls within the exempt protocol reviewed by our Institutional Review Board (IRB), Salus IRB. Under this protocol and following FERPA guidelines, we did not need student or parental permission, nor did the school district require it.

Social Emotional Competency Measures

The primary outcome measure is the DESSA-HSE, a CASEL-aligned suite of SEL assessments (Aperture Education, 2022). We used two versions of the DESSA-HSE: the DESSA-student-self rating assessment (DESSA-SSR) and the DESSA-teacher rated assessment (DESSA-TR).

Both, the DESSA-SSR and DESSA-TR are norm-referenced, standardized assessments (Aperture Education, 2020; Aperture Education, n.d.). The DESSA-SSR has seven SE competency scales: self-awareness/optimistic thinking, self-management, social-awareness, relationship skills, personal responsibility, decision making, and goal-directed behavior. The DESSA-TR has eight-items, one for each SE competency. In the teacher version, self-awareness and optimistic thinking are two separate scales.

Each assessment produces *T*-scores for the individual scales and an overall SE composite. Each DESSA *T*-score is a standard score set to have a mean of 50 and standard deviation of 10. Scores range from 28–72. DESSA-HSE uses three performance levels to describe student SE: Need for Instruction (\leq 40), Typical (41–59), and Strength (>60) (Aperture Education, 2022). Both forms of the DESSA-HSE are reliable according to their reliability coefficients. For the DESSA-SSR, scale-level Cronbach's alphas (indicators of internal consistency) ranged from .77–.83. For the DESSA-TR, Cronbach's alphas ranged from .85–.92. The DESSA-SSR composite has a Cronbach's alpha of .96 and the DESSA-TR composite has a Cronbach's alpha of .98. In fall 2023, students completed the DESSA-SSR. In spring 2024, students rated themselves again, and teachers rated students using the DESSA-TR. We used the fall 2023 scores as a pretest measure and the scores from spring 2024 as the outcome measure. These data are at the student level.

Achievement Measures

Although achievement is not a primary outcome of interest for this study, we examined the impact of HATC on student achievement in exploratory analyses. The NWEA MAP is an assessment tool used by a large number of school districts

⁵ Chronically absent refers to a student whose total excused and unexcused absences meet or exceed 10% of total days enrolled.

⁶Chronically truant refers to a student whose total unexcused absences meet or exceed 5% of total days enrolled.

nationwide for formative assessment. The NWEA MAP is a state standards-aligned, computer-adaptive assessment program that provides educators with information designed to improve teaching and learning. This adaptive test reflects the instructional level of each student and measures growth over time. NWEA created the test goal structures through an alignment process that links state standards to the NWEA item bank. The MAP is scored on a Rasch UnIT (RIT) scale, a measurement scale developed to simplify the interpretation of test scores. This scale is used to measure student achievement and student growth on an equal-interval scale so that a change of one unit indicates the same change in growth, regardless of the actual numerical values. RIT scores range from 150 to 300 and indicate a student's current achievement level along a curriculum scale for a particular subject. The assessment also provides percentile ranks. MAP scores are reliable with internal consistency values (Cronbach's alphas) of .96–.97 for reading and .97–.98 for mathematics in grades 9–11.

We received MAP scores for students entering grades 9–11 from RIMSD, along with demographic and behavioral data for students in grades 9–11 in April 2023 for RIHS and in December 2023 for TMLC. These data served as the baseline for exploratory analysis of impact on achievement, and as covariates in analysis of SE outcomes. We also collected posttest data in the spring 2024 as the outcome. Specifically, the district provided the following student data.

- 2022–23 Fall NWEA MAP Reading (RIT scores and percentiles)
- 2022–23 Fall NWEA MAP Mathematics (RIT scores and percentiles)
- 2022–23 Winter NWEA MAP Reading (RIT scores and percentiles)
- 2022–23 Winter NWEA MAP Mathematics (RIT scores and percentiles)

Program Implementation Measures

In addition to student demographic, behavioral, and assessment data, we also collected implementation data. Data collected includes training observations, sign-in sheets from training and reflection/feedback sessions, and teacher surveys. In the spring, we conducted virtual interviews with a subset of teachers (18 in total) to collect additional information on implementation. Table 7 outlines the timeline of the major data collection phases.

| | 2022–2023 school year | | | | | | 2023–2024 school year | | | | | | | | |
|--------------------------------|-----------------------|-----|-----|-----|------|-----|-----------------------|-----|------|------|-----|----------------|----------------|----------------|----------------|
| Data collection elements | Mar | Apr | Мау | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | Мау |
| Teacher baseline survey | RIHS | | | | | | | | TMLC | | | | | | |
| Initial teachers training | | | | | RIHS | | | | | TMLC | | | | | |
| Teacher implementation surveys | | | | | | | RIHS | | | RIHS | | TMLC | RIHS & TMLC | TMLC | RIHS & TMLC |
| Training/feedback observations | | | | | | | RIHS | | | RIHS | | RIHS & TMLC | | TMLC | RIHS & TMLC |
| Teacher interviews | | | | | | | | | | | | | | RIHS & TMLC | RIHS & TMLC |
| | | | | | | | | | | | | | | | |

TABLE 7. IMPLEMENTATION DATA COLLECTION SCHEDULE FOR THE HOW ARE THE CHILDREN STUDY

Teacher Baseline Survey

Prior to randomization and the initial training for the research study, teachers attended an informational session about the study. These sessions took place in March 2023 for RIHS and November 2023 for TMLC. Following the session, teachers received a link to the online consent form. When a teacher agreed to participate in the study, the form led to the baseline survey. The baseline survey included questions about teacher background including their primary position, education level completed, teaching credentials and certification, years of teaching experience, and personal demographic information. We asked teachers to reflect on their beliefs about SEL and experience implementing SEL. We also asked RIHS teachers to reflect on the activities that they typically implement during advisory period. We used this information to help describe the context of implementation and to assess balance between program and control, based on teacher background characteristics.

Teacher Training Observation

We observed the initial teacher training of RIHS teachers in July 2023 and TMLC teachers in December 2023. We asked additional questions about the training through the teacher online surveys. We used these data to describe the content of and teacher satisfaction with the training.

Teacher Implementation Surveys

We deployed quarterly surveys for RIHS *HATC* and BAU teachers and monthly surveys for TMLC *HATC* and BAU teachers. Table 8 outlines the survey schedule and the response rates for the teachers participating in the study. The response rates were very high, with an overall rate of 97% for across all surveys.

| | | RIHS response rates | | |
|---|---|--|--|--|
| | | How Are the Children group | BAU group | Total |
| Survey | Date | (<i>n</i> = 20) | (<i>n</i> = 22) | $(n = 42)^{a}$ |
| Quarterly survey 1 (RIHS) | September 2023 | 100% | 95% | 98% |
| Quarterly survey 2 (RIHS) | December 2023 | 100% | 86% | 93% |
| Quarterly survey 3 (RIHS) | March 2024 | 100% | 86% | 93% |
| Quarterly survey 4 (RIHS) | May 2024 | 100% | 82% | 90% |
| | 1 | | | |
| | | TN | /LC response rates | |
| | | TN How Are the | ILC response rates | |
| | | TN How Are the Children group | ILC response rates BAU group | Total |
| Survey | Date | TM How Are the Children group (<i>n</i> = 5) | ILC response rates BAU group (<i>n</i> = 3) | Total (<i>n</i> = 8) ^b |
| Survey Monthly survey 1 (TMLC) | Date February 2024 | TN How Are the Children group (<i>n</i> = 5) 100% | ILC response rates BAU group (<i>n</i> = 3) 100% | Total (<i>n</i> = 8) ^b 100% |
| Survey Monthly survey 1 (TMLC) Monthly survey 2 (TMLC) | Date February 2024 March 2024 | TN How Are the Children group (n = 5) 100% 100% | ALC response rates BAU group (<i>n</i> = 3) 100% 100% | Total (<i>n</i> = 8) ^b 100% 100% |
| Survey Monthly survey 1 (TMLC) Monthly survey 2 (TMLC) Monthly survey 3 (TMLC) | Date February 2024 March 2024 April 2024 | TN How Are the Children group (<i>n</i> = 5) 100% 100% 100% | ILC response rates BAU group (<i>n</i> = 3) 100% 100% 100% | Total (<i>n</i> = 8) ^b 100% 100% 100% |

TABLE 8. SURVEY PARTICIPATION RATES

^a At RIHS, we randomized 44 teachers to condition. One teacher left their position before the start of quarterly data collection in September, and one teacher withdrew from participation in March 2024. The final sample size for RIHS is 42.

^b At TMLC, we randomized nine teachers to condition. One teacher left the school in March 2024. The final sample size for TMLC is eight.

We developed the survey topics to account for the various aspects of teacher and student actions associated with HATC implementation, as well as activities taking place in BAU classes. We also collect data on teacher SE competencies, burnout, relationships with students, and job satisfaction.

We report quantitative survey data using descriptive statistics. The free-response portions of the surveys are minimally coded for common themes.

Total

97%

Quarterly/monthly survey topics included, but are not limited to, the following.

- Implementation conditions
- Training and feedback/reflection sessions
- Teacher outcomes

Implementation Conditions

We constructed survey items specifically designed to understand the conditions under which teachers implemented HATC in treatment classrooms and BAU in control classrooms at RIHS and TMLC. We collected the following data on implementation.

- Days per week implementing HATC
- Activities taking place when HATC is not being implemented
- Satisfaction with HATC activities and materials
- Student engagement with HATC units/lessons
- Successes and challenges in implementing HATC
- Interest in continuing to implement HATC
- Time spent preparing to implement HATC or BAU advisory (RIHS only)
- Activities implemented during BAU advisory (RIHS only)

We are particularly interested in *HATC* teachers' perceptions of the appropriateness of the curriculum for their students and their perceptions of student engagement with the content. In addition, at RIHS, we want to compare the preparation time that *HATC* teachers report to the time control teachers say it takes them to prepare for BAU advisory. We also included several open-ended responses for teachers to expand on their experiences implementing HATC and BAU in advisory/second block.

Training and Feedback/Reflection Sessions

Implementation surveys for *HATC* teachers at RIHS and TMLC included several questions about teachers' experiences with their pre-implementation training. As a reminder, this training took place in July 2023 for RIHS and December 2023 for TMLC. Surveys also included questions about feedback and reflection sessions. To the best of our ability, we coordinated the launch of surveys to take place after quarterly/monthly feedback and reflection sessions. We anticipated that data from these questions will help CWK improve the way they train and deliver support to teachers using the HATC program.

Teacher Outcomes

On the baseline teacher survey, we administered the Teacher Social-Emotional Learning Beliefs Scale (Brackett et al., 2012). This 12-item scale measures teachers' comfort with teacher SEL competencies, commitment to learning about SEL, and interest in learning more about SEL. On subsequent each survey, we administered measures to capture four identified teacher outcomes: teacher-student relationships, teacher well-being, teacher SE competencies, and job satisfaction. On quarterly/monthly survey 1 and 3, we incorporate the relationship dimension subscale of the Classroom Environment

Scale (CES) (Trickett & Moos, 2002) to assess teachers' ratings of the quality of their relationships with their students and the Maslach Burnout Inventory-Educator Survey (MBI-ES) to assess teacher well-being (Maslach et al., 1986). The CES evaluates the effects of course content, teaching methods, teacher personality, class composition and characteristics of the overall classroom environment. The relationship dimension of CES includes three subscales:

- 1. Involvement: the extent to which students are attentive and interested in class activities, participate in discussions, and do additional work on their own
- 2. Affiliation: the friendship students feel for each other, as expressed by getting to know each other, helping each other work, and enjoying working together
- 3. Teacher Support: the help and friendship the teacher shows toward students; how much the teacher talks openly with students, trusts them, and is interested in their ideas

We used the Real Form (Form R) which measures teachers' perceptions of the current classroom learning environment. Internal consistencies for the three subscales are .85 for involvement, .74 for affiliation, and .84 for teacher support (Trickett & Moos, 2002). These subscales included 30 items, 27 of which we administered. We removed three items due to contentious language (e.g., this teacher does not trust students). Teachers rated each item as true or false, as it applied to their advisory/second block students. The MBI-ES assesses three components of teacher well-being using a 22-item scale: 1) emotional exhaustion (depletion of emotional resources), 2) depensionalization (negative feelings about one's students), and 3) reduced personal accomplishment (tendency to evaluate oneself negatively with regard to work). Respondents read a series of statements and respond with how frequently they experience the stated feelings or attitudes on a 6-point scale ranging from Never to Everyday. Cronbach's alpha is .90 for emotional exhaustion, .79 for depersonalization, and .71 for personal accomplishment (Maslach et al., 2018). Higher scores on the emotional exhaustion and depersonalization subscales correspond to greater degree of experienced burnout. Lower scores on the personal accomplishment subscale correspond to greater degree of experienced burnout. On quarterly/monthly surveys 2 and 4, we drew from the Educator Social and Emotional Competencies (E-SEC) scale (Yoder, 2022) and the TIMSS 2019 Teachers' Job Satisfaction scale (IEA, 2019). The E-SEC is a tool "designed to help educators (teachers, school staff, and out-of-school time professionals) reflect upon (a) their own social and emotional competencies (SEC) and (b) their capacities to implement current practices that influence student SEL or the conditions they create to support student social and emotional development." One aim is to understand educators' ability to promote student SEL through instructional practices. The tool includes 32 items across five subscales that align to CASEL-identified competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision making. We ask teachers to reflect on their own SE competencies using a 5point Likert scale (strongly disagree to strongly agree). Items within competencies were averaged to create a composite score for each of the five competencies. Teachers' job satisfaction is based on teachers' responses to five statements about how they feel about being a teacher, on a 4-point Likert scale (Never or almost never, sometimes, often, very often). The Teachers' Job Satisfaction scale includes the following items:

- 1. I am content with my profession as a teacher.
- 2. I find my work full of meaning and purpose.
- 3. I am enthusiastic about my job.
- 4. My work inspires me.

Teacher Interviews

We interviewed a subsample of teachers (18 teachers) in the HATC and BAU conditions. At RIHS, we interviewed five teachers in the BAU condition and 13 teachers implementing HATC. At TMLC, we interviewed two BAU teachers and three *HATC* teachers. Interviews took place virtually in May and June 2024. Teachers received an honorarium for their participation.

In interviews, we asked about teachers' respective experiences during their advisory/second block classes in the 2023–24 school year (see Appendix C for the full interview protocol). Interview questions included the following.

- *HATC* and BAU teachers
 - o Reason for deciding to participate in the study
 - o Specific challenges that teachers were hoping the curriculum would address
 - o Previous experience with SEL
 - Perceptions of school climate around topics like SEL
- HATC teachers
 - o Perceptions of students' engagement with the curriculum
 - o Perceptions of support from their administrations
 - Views on training and feedback and reflection sessions
 - o Successes and challenges of implementation
- BAU teachers
 - o Perceptions of SEL skills their students gained in advisory/second block
 - Typical activities during advisory (RIHS only)
 - o Awareness of the HATC curriculum

FORMATION OF THE EXPERIMENTAL GROUPS

This section describes the study sample used to assess the impact of HATC. We started with the baseline sample which consisted of the participating teachers that were randomly assigned to the *HATC* or control group, and the students on the rosters of their advisory classes as specified just before random assignment.

RIHS finalized rosters for 2023–24 in April 2023, and we conducted random assignment in May 2023. TMLC finalized rosters in early fall 2023, and we conducted random assignment in December 2023. Randomization was within each of the two schools, and we considered each school was a randomized block. In each school, randomization occurred after teacher rosters were established, and before implementation started.

The number of students on study teachers' rosters at time of random assignment were 734 at RIHS and 58 at TMLC.

Baseline and Analytic Samples

The baseline sample consists of the teachers randomized to HATC or control, with their students.

Ideally, by randomizing assignment into the two conditions, we create groups that look the same in terms of important characteristics, including demographics and prior achievement. In addition, because we randomized teachers in blocks, we can expect a somewhat better balance on characteristics used to form the blocks. However, by chance (as well as the imprecision of forming the pairs), the groups are never exactly balanced and may differ on important characteristics that may affect the outcome. Therefore, it is important to evaluate balance between conditions on key characteristics just following randomization.

In addition to this, the sample may lose teachers and students over the course of the study for multiple reasons. For example, students may move away from the district or they may be absent on days when outcomes are assessed. Therefore, it is helpful to conduct a second balance check involving only the teachers and students who are included in the final analysis, especially to see if they attritted more from one condition than the other. In the current study, we only included students who had a posttest (i.e., a post-intervention count or score) in analysis. Therefore, we consider anyone without a posttest as lost to attrition and exclude them from the analytic sample.

If the rate of overall attrition is large, even if there is no difference between conditions in the rate of attrition, a loss of cases may produce inaccuracy (bias) in the result, if, for example, those who leave the program group are different from those who leave the control group. This would happen, for example, if teachers who attrite from the control group, on average, have students with lower achievement than teachers that attrite from the program group.

If the rate of differential attrition is substantial, then this can produce inaccuracy in the impact estimate, even if those who leave the two conditions are not fundamentally different. This would happen, for example, if teachers and their higher-scoring students are more likely to leave the study if they are in the program condition than the control condition.

We report overall and differential attrition at the level of randomization below. This allows calculation of potential for bias, according to What Works Clearinghouse (WWC) standards (WWC, 2022).

In this section, we (1) inspect the count of teachers and students for both the baseline and analytic samples for the main outcomes, and (2) examine whether characteristics are balanced between the *HATC* and control groups for the baseline sample. Whether balance on baseline characteristics (i.e., baseline equivalence) is present for the analysis sample depends on the outcome. We report these per outcome in <u>Chapter 5</u>.

Table 9 reports the counts of teachers and students on their advisory rosters at the time of random assignment, and the number of those individuals for whom outcomes were obtained and used in the impact analysis.

| | BAU Group | | | HATC Group | | | | |
|-------------------------------------|-----------|--|----------|--|----------|--|----------|--|
| | Clusters | | Students | | Clusters | | Students | |
| | | No. with | | No. with | | No. with | | No. with |
| | No. | outcomes at posttest analytic sample | No. | outcomes at posttest analytic sample | No. | outcomes at posttest analytic sample | No. | outcomes at posttest analytic sample |
| | | | | | | | | |
| DESSA | 27 | 27 | 405 | 329 | 26 | 25 | 387 | 303 |
| Disciplinary referrals ^a | 23 | 23 | 380 | 374 | 21 | 21 | 354 | 347 |
| Days absent ^a | 23 | 23 | 380 | 374 | 21 | 21 | 354 | 347 |
| MAP Reading ^b | 27 | 23 | 353 | 265 | 26 | 21 | 323 | 227 |
| MAP Mathematics ^b | 27 | 23 | 353 | 253 | 26 | 22 | 323 | 193 |

TABLE 9. NUMBERS OF TEACHERS AND STUDENTS AT TIME OF RANDOM ASSIGNMENT AND INCLUDED IN FINAL ANALYSIS

^a This analysis excludes TMLC because of unavailability of data at the time of writing this report. Results will be forthcoming if those data can be obtained.

^b MAP scores are only available for students in grades 9–11.

In Table 10, we compare the composition of the control and *HATC* groups for all 53 teachers and the 792 students that were on their advisory rosters at time of random assignment (i.e., for the baseline sample). We include only students for whom we obtained the baseline demographic data (therefore, they do not always sum to 53 teachers and 792 students). For each of the characteristics of this sample, we conducted a statistical test to determine the likelihood of obtaining a chance imbalance between conditions as large as or larger than the one observed. While the randomization assures us that any imbalance was a result of chance, and is not an indication of selection bias, it is useful to examine the actual groups as formed at baseline to see whether the amount of imbalance is something we would expect to see less than 5% of the time (the standard conventionally used to assess if an effect is statistically significant). We see that balance is achieved on the observed characteristics.

We assessed baseline equivalence using a model that regresses the baseline variable against an indicator of random assignment status (=0 for control and =1 for *HATC*), an indicator of the blocking variable (school), and random effects for unit of assignment (teacher) and student.

| Background characteristics | BAU Group | <i>HATC</i> Group | Less than 5% chance of seeing this much imbalance |
|----------------------------|--------------|-------------------|--|
| Male | 209 (52%) | 206 (53%) | Yes |
| Grade 8 | 9 (2%) | 11 (3%) | |
| Grade 9 | 145 (36%) | 90 (23%) | |
| Grade 10 | 113 (28%) | 104 (27%) | Yes |
| Grade 11 | 95 (24%) | 129 (33%) | |
| Grade 12 | 43 (11%) | 52 (14%) | |
| Asian | 23 (6%) | 35 (9%) | |
| Black | 116 (29%) | 127 (33%) | Vos |
| Multiracial | 47 (12%) | 33 (9%) | 165 |
| White | 214 (54%) | 190 (49%) | |
| Hispanic | 77 (19%) | 56 (15%) | Yes |
| Limited English Proficient | 32 (8%) | 61 (16%) | Yes |

TABLE 10. CHARACTERISTICS OF STUDY SAMPLE WHEN ROSTERS RECEIVED (BASELINE SAMPLE)

Note. n = 786; one student in the baseline sample was missing grade level, and one person was missing data on their race.

ANALYSIS METHODS

Student Impacts

We modeled student-level socioemotional competence, attendance, disciplinary referrals, and achievement as continuously distributed with impacts on those outcomes estimated using a hierarchical linear model, nesting students (level 1) within teachers/classrooms (level 2). The model we used to estimate impact on SE competency and attendance is below. Schools are the blocking variables.

Level-1: Student Level

$$Y_{ij} = \beta_{0j} + \beta_{1j} Y_{ij}^* + \sum_{m=1}^{M} \beta_{2,mj} X_{mij} + \varepsilon_{ij}$$

Level-2: Cluster (Advisory Class / Teacher) Level

$$\beta_{0j} = \gamma_{00} + \gamma_{01}(T_j) + \gamma_{02}S_j^* + \sum_{q=1}^{Q}\gamma_{03,q}W_{qj} + u_{0j}$$
$$\beta_{1j} = \gamma_{10}$$
$$\beta_{2,mj} = \gamma_{2,m0}$$

Where,

| Y_{ij} | = the <i>outcome</i> for the i^{th} student in the j^{th} | ^a class (e.g., DESSA score or Nun | uber of Days Absent) |
|----------|---|--|----------------------|
|----------|---|--|----------------------|

| Y_{ij}^* | = a pre-test measure fo | or the i^{th} student in | the j^{th} class |
|------------|-------------------------|----------------------------|--------------------|
|------------|-------------------------|----------------------------|--------------------|

- X_{mij} = the *m*th of *M* additional covariates for student *i* in class *j*
- ε_{ij} = a residual error term for student *i* in class *j*

 β_{0j} = the intercept for class *j*

 β_{1j} = the effect of pretest in class *j*

- $\beta_{2.mj}$ = the effects of student covariates in class *j* (including grade level)
- γ_{00} = the mean intercept
- γ_{01} = the treatment effect
- γ_{02} = the added-value effect of membership in TMLC relative to RIHS.
- $\gamma_{03.q}$ = the effect of class-level covariates (e.g., percent of students receiving fee waiver; years of teaching by the class teacher)
- T_i = 1 if class *j* is assigned to treatment, and = 0 if class *j* is assigned to comparison
- $S_i^* = 1$ if class *j* is in TMLC site, and = 0 if class *j* is in RIHS site
- W_{qj} = the q^{th} of Q covariates for class j
- $\mu_{0j} = \text{random intercept term} \text{deviation of class } j' \text{s mean from the grand mean, conditional on covariates;} \\ \text{assumed to be normally distributed with mean 0 and variance } \tau_{00}^2$

 γ_{10} = mean effect of pretest

 $\gamma_{2.m0}$ = mean effect of student covariate *m*

Impacts on attendance used proportion of days attended as the outcome, and impacts on disciplinary referrals used the number of referrals as the outcomes. Recognizing that the variance in outcomes as proportions could differ at the schools, given a difference between them in the number of days of schooling, we included a sensitivity analysis where the impacts were weighted by the inverse of the variances at each school. (This made virtually no difference to the results.) For disciplinary referrals, we examined also the counts of *any* referrals across conditions. We converted the log odds ratio of any disciplinary referrals to the Cox log odds ratio (WWC, 2022).

In the model displayed above, we used the estimate of γ_{01} to evaluate the average impact of HATC relative to the BAU condition. Results were reported as effect sizes. The main outcomes—the "adjusted effect size"—was the estimate of γ_{01} , divided by the pooled standard deviation of the outcome variable.

We also examined impacts on student-rated DESSA scores (regardless of whether a student also had a teacher rating [n = 498 students]) and on teacher-rated DESSA scores (regardless of whether a student also had a self-rated score [n = 611 students]). This will facilitate WWC review of the impact findings.

Covariates were modeled at individual student and class/teacher levels. The covariates used are listed in supplementary materials, in which we display the full impact findings for each analysis. A dummy variable indicates membership in the two schools.

Supplementary material provides attrition calculations at the teacher and student levels for DESSA scores, attendance, and disciplinary outcomes. For all of the analyses, overall and differential attrition was low enough to meet WWC standards without reservations. The analysis excluded students with missing outcomes. We used the dummy variable imputation approach with missing covariates.

Moderator effects were estimated using the model above, but with inclusion of an additional term for the interaction between the indicator of assignment status, T_j , and the moderating variable. The coefficient for this term tells us if the impact is different between levels of the moderating characteristics, for example, between males and females.

Teacher Impacts

To assess **exploratory impacts** on teachers (positive relationship with students in the classroom environment, well-being, SE competence, job satisfaction), a parallel model to the one above was used, but with teacher-level outcomes and covariates. Teacher-level covariates included number of years of teaching, teacher gender, an indicator of prior experience receiving SE professional learning, scores on a baseline survey about SEL beliefs, the proportion of students in the teacher's class who are male, the proportion of students who are White, and the proportion of students in the class who are Limited English Proficient.

Chapter 3. Implementation Findings

CHAPTER OVERVIEW

In this chapter, we describe the activities that took place during the advisory/second block period among the *HATC* and BAU groups to inform the interpretation of teacher and student outcomes. Data for this section comes from quarterly (RIHS) and monthly (TMLC) surveys and teacher interviews. We obtained additional data through sign-in sheets/attendance logs and notes from training, feedback, and reflection sessions. In the following sections, we present RIHS and TMLC results separately for several key reasons: 1) implementation differed between schools (e.g., RIHS implemented for one-year and TMLC implemented for half of a year); 2) the schedule of training and feedback and reflection sessions differed; and 3) the contexts of the schools are different. Additionally, given the teacher sample sizes of each school, we report the number and percentage for RIHS and only the number for TMLC, except when reporting FOI, as the small sample size inflates percentages.

We report implementation results in the following categories.

- Conditions for implementation
- Extent of program implementation
- Comparison of classroom implementation between HATC and BAU
- Implementation successes and teacher satisfaction with the HATC curriculum

CONDITIONS FOR IMPLEMENTATION

Here we provide a description of the conditions under which implementation in *HATC* classrooms took place. Specifically, we present data on training and materials and administrative support for the program.

Training and Feedback Sessions

Based on responses to quarterly survey 1 in September 2023, most RIHS teachers (85%; 17 of 20 respondents) attended both days of summer training. Most RIHS teachers reported that the summer training improved (1) their understanding of the benefits of SEL (68%; 13 of 19 respondents), (2) the goals of the HATC curriculum (63%; 12 of 19 respondents), and (3) the benefits of PBL (63%; 12 of 19 respondents) "quite a bit" or "very much" (Figure 2). Just over a third of the RIHS teachers (37%; 7 of 19 respondents) felt that the summer training improved their ability to implement the curriculum materials in their classroom "quite a bit" or "very much."


Not at all Very little Somewhat Ouite a bit Very much

FIGURE 2. RIHS TEACHERS' IMPRESSIONS OF HATC SUMMER TRAINING

Note. *n* = 19

Based on responses to their first monthly survey in February 2024, all TMLC teachers (5 of 5) reported that the 4-day introductory virtual training improved their understanding of the goals of the curriculum, the benefits of SEL, and the benefits of PBL "quite a bit" or "very much." Four of the five TMLC teachers reported that the training improved their ability to implement the curriculum in their classroom, and that their questions about the curriculum were answered "quite a bit" or "very much." While three of the five TMLC teachers reported that they were able to engage with the HATC curriculum themselves "quite a bit" or "very much," four of the five reported that the training did "very little" or only "somewhat" made them feel more prepared to use the film kits since the training was virtual and the teachers did not have the kits for hands-on practice. Overall, most RIHS (68%; 13 of 19 respondents) and TMLC teachers (4 of 5) were "somewhat" or "completely satisfied" with their first training to introduce the curriculum.

We also asked teachers to report on their experience attending feedback and reflection sessions on their quarterly/monthly surveys. As a reminder, teachers at RIHS were invited to attend four feedback and reflection sessions during the school year and teachers at TMLC were invited to attend three sessions during the semester in which they implemented HATC. Fewer than half of RIHS teachers (35%; 7 of 20 respondents) attended most quarterly feedback and reflection sessions (i.e., three to four sessions). At RIHS, teachers found their quarterly sessions to be less helpful as the year progressed (Figure 3).

Most teachers (71%; 10 of 14 respondents) found the first session in September 2023 to be "helpful" or "very helpful," for supporting their ongoing use of the HATC curriculum, but the majority of the teachers (63%-82%; *n* = 19-20 depending on the survey) found sessions two, three, and four to be "not at all" to "somewhat helpful." In open-ended survey responses, teachers commonly reported that they appreciated the opportunity to discuss their experiences implementing the curriculum (e.g., stating concerns, discussing successes and challenges). Some teachers expressed a desire for their peers to engage more during the sessions. Engaging students was a common topic of discussion. As filming ramped up, there were ongoing discussions about concerns relating to students' use of the film kits and the editing process.



📕 Not at all helpful 📕 Slightly helpful 📕 Somewhat helpful 📒 Helpful 📒 Very helpful

FIGURE 3. RIHS TEACHERS' RATINGS OF HELPFULNESS OF FEEDBACK AND REFLECTION SESSIONS

Four out of the five TMLC teachers attended two- or three-monthly sessions. In contrast to RIHS teachers, TMLC teachers found their monthly sessions to be *more* helpful as the year progressed. Only one teacher (out of four who attended) found the first session to be "helpful." The remaining three attendees reported the first session was "slightly" or "somewhat" helpful. However, most teachers found session two (3 of 4 teachers) and session three (4 of 5 teachers), to be to be "helpful" or "very helpful." One teacher explained, "The feedback and reflections sessions were very helpful throughout this process. [CWK] has been great working with us to answer questions, allow us time to discuss as a team, and look at our own personal SEL as well." Another teacher reflected, "Every time we meet there is opportunity to have our questions answered and hear what other rooms are doing."

Administrative Support

On each quarterly/monthly survey, we asked teachers to rate the administrative support they received around the curriculum. At RIHS, teachers assessed if their school administrators communicated a clear vision for how HATC time should be used and if they have received support from their school administrators around expectations for advisory. Across surveys, fewer than half of RIHS *HATC* teachers (32%-40%; *n* = 19-20 depending on the survey) "agreed" or "strongly agreed" that their school administrators communicated a clear vision for how advisory time should be used. Nearly half of RIHS teachers (40%-47%; *n* = 19-20 depending on the survey) "agreed" or "strongly agreed" that they received support from their school administrators around expectations for advisory. On quarterly survey 3 in March 2024, over half of RIHS teachers (58%; 1 of 19 respondents) "agreed" or "strongly agreed" that they received support. This bump in ratings coincides with the introduction of virtual meetings with the production team, which replaced instruction twice per week.

At TMLC, teachers assessed if their school administrators had communicated a clear vision for how HATC will impact their students and if they received support from their school administrators around expectations for implementing the HATC curriculum. During the first half of implementation, four out of five TMLC teachers "agreed" or "strongly agreed" that their school administrators communicated a clear vision for how HATC will impact their students. The number of TMLC teachers who "agreed" or "strongly agreed" with that statement declined slightly on the remaining surveys, which may reflect when the curriculum began to focus primarily on filming and shifted away from SEL content. One teacher explained, "It seemed almost like when we got into it that the making of the video [that] was more important than the [SEL] material and that's what I really what attracted me to in the first place." It is also possible that concerns around low student attendance (see <u>Chronic Absenteeism</u>) coupled with technical issues (see <u>Missing Materials and Technical Issues</u>) led teachers to feel less sure about the intended impact on their students. We found similar trends in TMLC teachers' agreement that they received support from their school administrators around expectations for implementing the HATC curriculum.

Summary of the Conditions for Implementation

All participating teachers received HATC training at the beginning of the school year (RIHS) or in December before spring implementation began (TMLC). Implementation of HATC began at the start of the school year in RIHS, and all teachers confirmed that they had the needed materials at the time of the first quarterly survey in September 2023. At TMLC, implementation began in January 2024, and all teachers confirmed that they received their materials. As implementation continued, most RIHS teachers found feedback and reflection sessions to be "not at all" to "somewhat" helpful. In contrast to RIHS teachers, TMLC teachers found their monthly sessions to be more helpful as the year progressed. Both RIHS and TMLC teachers found the virtual sessions with the production team to be helpful, especially the guidance provided around the editing process.

EXTENT OF HATC PROGRAM IMPLEMENTATION AND SATISFACTION

In this section, we describe the extent of HATC implementation in participating teachers' classrooms. We present findings related to: (1) fidelity of implementation, (2) the number of days per week that teachers implemented, (3) completion of the HATC SEL units and PBL breaks, (4) impediments to implementation, and (5) adaptations made to the curriculum to address challenges.

Fidelity of Implementation Results

As a reminder, for this project, we identified two key components each of which have two indicators. We identified teacher professional learning as key component 1, with attendance at initial teacher training and attendance at feedback and reflection sessions (i.e., periodic teacher coaching) as indicators. We set thresholds for component 1 at the school level and the program level. We identified provision of the HATC curriculum as key component 2 with provision of SEL resources and provision of PBL resources as indicators. For component 2, the threshold is measured at the program level.

Teacher professional learning (Component 1) did not meet fidelity in Year 1 (Table 11). Both schools met the fidelity threshold for attendance at the initial teacher training (Component 1; Indicator 1). The majority of teachers at RIHS (85%; 17 of 20) attended both days of summer training, exceeding the 80% threshold for adequate implementation. All TMLC teachers (100%; 5 of 5) attended all four days of their initial training, exceeding the 60% threshold for adequate implementation. However, neither school met the fidelity threshold for attendance at the periodic coaching sessions (Component 1; Indicator 2). Just over a third of RIHS teachers (35%; 7 of 20) attended three to four feedback and reflection sessions, falling below the 80% threshold set for fidelity. However, most TMLC teachers (80%; 4 of 5) attended three feedback and reflection sessions, exceeding the 60% threshold set for fidelity. Therefore, the program-level threshold for component 1 was met with fidelity as 50% of schools (i.e., TMLC) met fidelity on both component indicators.

Provision of the HATC curriculum (Component 2) met fidelity in Year 1 (2023–24). CWK provided all participating teachers at RIHS and TMLC with SEL resources (Component 2; Indicator 1) and PBL resources (Component 2; Indicator 2) through the HATC online portal (RIHS) and curriculum PDFs and PowerPoints (TMLC). As both schools met the threshold for each indicator for the provision of the HATC curriculum (Component 2), this indicates that RIHS and TMLC implemented Component 2 with fidelity. We will continue to evaluate fidelity of implementation again in Year 2 (2024–25), as the district continues to implement.

| TABLE 11. FIDELITY C | OF IMPLEMENTATION | RESULTS FOR YEAR 1 |
|----------------------|-------------------|---------------------------|
|----------------------|-------------------|---------------------------|

| Indicator | Result | School-level threshold | Program-level threshold |
|--|--|---|--|
| Component: Teacher | Professional Learning | | |
| | | RIHS | |
| | | 1: 80% HATC teachers have score of 2 | RIHS |
| Initial teacher training | RIHS 85% (17 of 20) teachers | 0: <80% HATC teachers have score of 2 | 2: School has score of 1 on both component indicators |
| attends all days attends half only attends no training | attended all training TMLC 100% (5 of 5) teachers attended all training | TMLC | 1: School has score of 1 on only 1 component indicator |
| | | 1: 60% HATC teachers have score of 2 | 0: School has score of 1 on 0 component indicators |
| | | 0: <60% HATC teachers have score of 2 | TMLC |
| | | Overall: Fidelity MET | |
| Periodic teacher | | RIHS | 2: School has score of 1 on both component indicators |
| coaching | | 1: 80% HATC teachers have score of 2 | 1: School has score of 1 on only 1 component indicator |
| RIHS2: attends 3-4 sessions1: attends 1-2 sessions0: attends 0 sessionsTMLC40% (2 of 5) teachers | RIHS 35% (7 of 20) teachers | 0: <80% HATC teachers have score of 2 | 0: School has score of 1 on 0 component indicators |
| | 1: 60% HATC teachers have score of 2 | Threshold for adequate implementation at program level = at least 50% of schools have a | |
| <u>IMLC</u> 2: attends 2-3 sessions | attended 2-3 sessions | 0: <60% HATC teachers have score of 2 | score of 2 Overall: Fidelity MET |
| attends 1 session attends 0 sessions | | Overall: Fidelity WAS PARTIALLY MET | |

| Indicator | Result | School-level threshold | Program-level threshold |
|--|--|------------------------|---|
| Component: HATC C | urriculum | | |
| Provision of SEL resources 1: Provided all participating teachers with SEL resource access 0: Did not provide all participating teachers with SEL resource access | RIHS 100% (20 of 20) teachers received access to SEL resources TMLC 100% (5 of 5) teachers received access to SEL resources | RIHS = 1 TMLC = 1 | RIHS 2: School has score of 1 on both component indicators 1: School has score of 1 on only 1 component indicator 0: School has score of 1 on 0 component indicators TMLC |
| Provision of PBL resources 1: Provided all participating teachers with PBL resource access 0: Did not provide all participating teachers with PBL resource access | 100% (20 of 20) teachers received access to PBL resources TMLC 100% (5 of 5) teachers received access to PBL resources | RIHS = 1 TMLC = 1 | 2: School has score of 1 on both component indicators 1: School has score of 1 on only 1 component indicator 0: School has score of 1 on 0 component indicators Threshold for adequate implementation at program level = a score of 2 Overall: Fidelity WAS met |

TABLE 11. FIDELITY OF IMPLEMENTATION RESULTS FOR YEAR 1

Number of Implementation Days Per Week

On each quarterly/monthly survey, we asked teachers to report how many days per week they were implementing the curriculum. At RIHS, we initially expected teachers to teach HATC four to five days per week. After the quarterly survey 1 administration in September 2023, this expectation was reduced to four days per week. Administrators advised teachers at TMLC to implement five days per week. At RIHS, most teachers (73%-95%; 14-19 of 20 respondents) reported implementing three or four days per week across the school year (Figure 4).



FIGURE 4. RIHS TEACHERS REPORT OF FREQUENCY OF HATC IMPLEMENTATION PER WEEK

Note. On quarterly survey 4 in May 2024, one teacher responded "it varies" to the number of days per week that they implemented the curriculum. They explained, "I had one group (of three) who just needed to edit their video. The other two groups were not doing any work."

At TMLC, days per week varied across implementation. Teachers averaged three days of implementation across the semester with a range of one to five days per week. Again, open-ended responses and interviews reveal that students' attendance drove implementation. One teacher who answered "it varies" explained, "Attendance in this class is very low all but one student missed between 13-22 days." Another teacher, who also reported that their implementation varied wrote, "Attendance impacted my ability to implement." Due to the small sample size at TMLC, we were able to track the amount of time teachers spent on HATC instruction over the course of implementation, teachers reported spending an average of 33 minutes per day on HATC. Across monthly surveys, averages ranged from 29–36 minutes. Most teachers reported a fairly consistent pattern of instruction time (Figure 5). This is notable because all TMLC teachers with larger peaks and dips in instructional time experienced significant impacts from absenteeism and changes in their classroom make-up. Going forward, it will be important to track how much time teachers are spending on HATC, as implementation is occurring during regular instructional time.



FIGURE 5. TMLC TEACHERS REPORT OF HATC INSTRUCTIONAL TIME ACROSS IMPLEMENTATION

Note. n = 4-5. Teacher 5 did not implement in Mid-April and Mary 2024 because, "Because attendance in this class is very low all but one student missed between 13-22 days."

SEL Units and PBL Breaks

At RIHS, the curriculum included an introductory unit (Setting Up Your Classroom), four SEL units, and five PBL breaks (Table 12). At TMLC, the consolidated curriculum included an introductory unit (Setting Up Your Classroom), three SEL units, and four PBL breaks (Table 13). Each SEL unit/PBL break incorporated two to three of the CASEL SEL core competencies.

Over half of RIHS teachers (65%-100%; 13–20 of 20 respondents) completed most of the SEL units and PBL breaks. Less than half of RIHS teachers (40%; 8 of 20 respondents) completed the final PBL break. However, 65% of classes (13 of 20 respondents) were able to upload a completed film to the repository that CWK created. It appears that by the end of the semester, teachers were unable to complete units because of filming or a lack of engagement once filming ended. One teacher explained, "Ran out of time between iPad connectivity issues, transfer issues, etc. Barely made the film submission deadline. There was no more time to give to the final units." Another wrote, "Trying to get my [students] to engage with the lessons before the documentary was done was difficult enough. Now that we have submitted a video they have

totally checked out." It also appears that some teachers skipped or did not complete lessons before moving onto other units of PBL breaks. This may be due to challenges with the content coupled with reported low student engagement.

| SEL competencies | SEL units/PBL breaks | Number and percent of teachers who reported completing each unit and PBL break | | | | | |
|--|--|--|--|--|--|--|--|
| Self -awareness, responsible | Setting Up Your Classroom | 20 of 20 (100%) | | | | | |
| decision making | PBL Break 1: Film Kit Introduction | 16 of 20 (80%) | | | | | |
| Self-management | Unit 1: Storytelling and Development | 18 of 20 (90%) | | | | | |
| relationship skills | PBL Break 2: Documentary and Reflection Week | 19 of 20 (95%) | | | | | |
| Relationship skills, | Unit 2: Pre-production | 17 of 20 (85%) | | | | | |
| responsible decision making | PBL Break 3: Gearing Up for Filming | 18 of 20 (90%) | | | | | |
| Relationship skills, | Unit 3: Production | 16 of 20 (80%) | | | | | |
| responsible decision making | PBL Break 4: Designing Team Project | 13 of 20 (65%) | | | | | |
| Self-awareness social | Unit 4: Post-Production | 13 of 20 (65%) | | | | | |
| awareness, relationship skills | PBL Break 5: Executing Team Project (Capstone Showcase) | 8 of 20 (40%) | | | | | |
| | | Number and percent of teachers who reported | | | | | |
| | Completed documentary | completing | | | | | |
| All | Class uploaded a completed film | 13 of 20 (65%) | | | | | |
| Note We calle stad this information across guartarly surveys. If a participant indicated that they had not completed on CEL writer DDL | | | | | | | |

TABLE 12. RIHS UNITS AND COMPETENCIES

Note. We collected this information across quarterly surveys. If a participant indicated that they had not completed an SEL unit or PBL break at the time of the survey, we asked the question again on the following survey.

At TMLC, three out of five teachers completed all SEL units and three of the four PBL breaks. As with RIHS, it appears that teachers may have skipped content in order to produce a video before the end of the school year. As one teacher noted:

We had to skip a lot of the unit in order to be able to complete our video on time. We watched the embedded videos to get info on how to create different aspects of our video but we were not able to go through each lesson completely. (TMLC teacher)

The two teachers who were unable to complete most of the lessons cited absenteeism as the driving factor. As one teacher said:

Unfortunately, my experience with the program was mediocre because of the environment/climate of our setting. I think for the next year it might be better to not have all students participate in the SEL lessons, but [have] only a few groups made up of regular attending students to complete videos. (TMLC teacher)

TABLE 13. TMLC UNITS AND COMPETENCIES

| SEL competencies | SEL units/PBL breaks | Number of teachers reported complete unit/break |
|--------------------------------|---|--|
| Self - awareness responsible | Setting Up Your Classroom | 5 of 5 |
| decision making | PBL Break 1: Film Kit Introduction & Documentary and Reflection | 5 of 5 |
| Self-management, | Unit 1: Pre-production | 3 of 5 |
| relationship skills | PBL Break 2: Gearing Up for Filming | 2 of 5 |
| Relationship skills, | Unit 2: Production | 3 of 5 |
| responsible decision making | PBL Break 3: Designing Team Project | 3 of 5 |
| Self-awareness, social | Unit 3: Post-Production | 3 of 5 |
| awareness, relationship skills | PBL Break 4: Executing Team Project | 2 of 5 |
| | Completed Documentary | Number of teachers who reported completing |
| All | Class uploaded a completed film | 3 of 5 |

Note. We collected this information across monthly surveys. If a participant indicated that they had not completed an SE unit or PBL break at the time of the survey, we asked the question again on the following survey.

Impediments to Implementation

On each quarterly/monthly survey and in teacher interviews, we asked teachers to identify any difficulties they experienced while implementing the curriculum. We consolidated responses across surveys and interviews to create a description of key themes that emerged. Upon reviewing responses, it became clear that RIHS and TMLC have important structural differences, which contributed to differences in their implementation experiences. Notably, RIHS students in *HATC* classrooms were very aware that other students in their school were able to use advisory period to catch up on school work and socialize with their peers. This had an important impact on the engagement of RIHS students and, therefore, the experience of implementation at RIHS. Contrasting this with TMLC, student engagement due to interest was less of a problem. Rather, as an alternative high school, TMLC experiences more student movement (e.g., students entering TMLC from RIHS, students leaving TMLC to return to RIHS) and more chronic absenteeism than in the traditional high school setting. Based on these considerations, we present key themes separately for each school.

Rock Island High School

Student Engagement and Motivation. The most persistent roadblock identified by RIHS teachers was student engagement and motivation. Early on in implementation, teachers raised issues about students missing Pride Time in order to take part in the curriculum. Pride Time takes place during advisory and allows teachers and students to complete work related to their core subject classes. Notably, parents of students in *HATC* classrooms also communicated their concerns about a lack of Pride Time to RIMSD. Teachers also noted that without a credit or grade associated with the class, many students were not interested in participating. In response to these concerns, RIMSD administrators and CWK agreed that HATC could be implemented four days per week instead of five days per week, which allowed one dedicated day per week for Pride Time. RIMSD also added a .25 credit to the course. These changes were well-received by teachers and students, particularly the addition of dedicated Pride Time. However, some teachers reported that the impact of the .25 credit was not enough to engage their students. Additionally, some teachers reported that some of their students found the content "boring" and were frustrated, especially since they were missing out on typical advisory and were unable to use the time to complete graded work. As one teacher commented:

Students don't care. Students ask "is this for a grade." Students want to go to their Pride Times classes for additional instruction. Honestly, the one piece of good "research" that can be taken from the first semester would be: grades matter. (RIHS teacher)

Through quarterly survey 2 and 3, December 2023 and March 2024, several teachers continued to report concerns with engagement amongst students. Across all SEL units, most teachers reported that about a quarter of their students were engaged in lessons (Figure 6). For PBL breaks, student engagement steadily declined (Figure 7). By PBL break 5, nearly 90% of teachers reported that only a quarter of their students were engaged with the content.



FIGURE 6. RIHS HATC TEACHER REPORT OF STUDENT ENGAGEMENT IN SEL UNITS



None of my students About a quarter of my students About half of my students About three-quarters of my students All of my students

FIGURE 7. RIHS HATC TEACHER REPORT OF STUDENT ENGAGEMENT IN PBL BREAKS

Absenteeism also impacted engagement in the curriculum. Teachers found it difficult to maintain momentum and complete lessons effectively when students were absent from school or class. This issue became more important as work on group projects increased. The absence of even one group member could delay progress for the entire team. The lack of motivation was especially evident among students who were absent frequently, which also impacted group work. The impact of absenteeism was compounded by busy schedules, testing, and other responsibilities during the months when filming was supposed to take place.

The delay of filming activities was a cited reason for disengagement. A teacher explained, "...The beginning material pacing and content lost all student interest." Another wrote, "By this point, students are lost and directionless because there hasn't been anything to "hook" them. The goal of this curriculum is for them to be creators, but they have yet to create." RIMSD and CWK anticipated that student engagement and motivation would increase as students began filming. This was the case for some students (see <u>The Filming Process</u>). Over half of classrooms (65%; 13 of 20 respondents) created one or more films and sent these films to CWK for further editing and consolidation. However, for some teachers who struggled to motivate students before filming, they were unable to draw those students back in and ultimately seven classrooms (35%) did not produce a final film.

In future iterations of the program, administrators may want to consider assigning a grade to the course to promote student interest from the beginning of the curriculum. Importantly, in the current HATC implementation for the 2024–2025 school year, the curriculum is only being implemented in ninth grade classrooms. As all ninth-grade students are experiencing the same curriculum, this may reduce the friction that Year 1 students felt because their peers did not have to "work" during advisory. Additionally, CWK adjusted the curriculum for the 2024-2025 school year to introduce more filming activities earlier in the curriculum, rather than waiting until the spring semester. It will be important to reflect back on these findings to understand how they impact student engagement across an implementation year.

Timing and Pacing Issues. Teachers consistently reported that the 25-minute advisory period did not provide enough time for engagement in content. As advisory also includes morning announcements and other school-mandated activities (e.g., surveys), implementation faced a number of interruptions which disrupted the flow of the curriculum and further disengaged students. In particular, as filming wrapped up and classes turned to editing their films, classes struggled to keep up the pace and finish their films on time. When asked why they would not complete the curriculum in time, one teacher explained, "Production, filming, and editing took a lot more time than anticipated." Another said, "Ran out of time between iPad connectivity issues, transfer issues, etc. [Barely] made the film submission deadline. There was no more time to give to the final units."

Teachers also raised concerns about the pacing of the curriculum. Interestingly, some teachers indicated that the pace of the curriculum was too fast, others reported it was too slow. Illustrative responses include, "We have had difficulties trying to fit a day's [worth of] instruction into the 25 minutes we have for the class." While another teacher said, "The pace is way too slow for my seniors. We could have finished everything in one semester."

Overall, the time available for the project was frequently mentioned as a limiting factor. With students missing classes, the tight schedule, and the overall complexity of the process, many teachers found it difficult to keep up with the pace and complete the project within the designated time frame. CWK introduced a pacing guide for the 2024–25 school year, which may alleviate some of the issues that teachers experienced around pacing. However, it will be important to continue to monitor the impact of absenteeism and the short length (25 minutes) of advisory period.

Curriculum Content. Turning to the content of the curriculum, three main concerns arose: (1) the suitable grade level for the content, (2) the appropriateness of the curriculum for all learners, and (3) the disconnection between SEL content and PBL content.

Early on in implementation, teachers began raising questions about the appropriateness of the curriculum's activities for juniors and seniors, especially the early SEL activities. A teacher explained, "With seniors, the [Unit 1] setting up classroom activities were just really not appropriate. I found them more appropriate for 7th-9th grade students." Another said, "I have seniors...Some of the stuff especially the classroom setup was slow for them. They enjoyed the shark tank episode lesson." In response to these concerns, RIMSD administrators and CWK decided to forgo a school-wide implementation at RIHS in the 2024–2025 school year and instead implement HATC only in freshman advisories.

For students in specialized classrooms (e.g., English Language Learners (ELL) or functional level), teachers also raised concerns about the need for built in supports to make the curriculum modifications for their students. For ELLs, the curriculum's vocabulary, technical language, and reading level proved to be significant roadblocks. ELL teachers reported that they were able to make adjustments, but this added a lot of additional burden onto these teachers and slowed down their implementation. Teachers in special education classrooms may require additional support to facilitate the use of the curriculum in their classroom. A teacher explained:

Normally in my classes I have a paraprofessional that helps. And [at] the time that we did this, there's no para to help us. So, it was very difficult to try to do that with no other adult helping. So, the actual

curriculum was definitely too high for my students. I modified and adapted and I kind of went through and picked and pulled out things that I think that they could do and we could do together. It was just very difficult to implement a lot of it. (RIHS teacher)

Looking forward, as RIMSD builds out curriculum guides and employs instructional coaches, it will be important to consider what how adaptations or modifications for learners with specialized needs may be built into the curriculum. Additionally, if advisory continues to be used for implementation, some classrooms may benefit additional supports (e.g., paraprofessionals).

Finally, several teachers reported a perceived disconnect between the SEL content and the PBL/filmmaking content in the curriculum. One teacher called the curriculum "disjointed." A common recommendation from teachers was that SEL and PBL components need to more clearly build off of one another. A teacher explained, "Students are disengaged. Activities do not align with the objectives...The SEL component has been essentially removed in how it is being paced currently per [the production team's] feedback."

Some teachers mentioned that by the second semester, it felt like the curriculum was only about filmmaking and producing a documentary, not SEL. One teacher concluded, "I don't understand how making a documentary aligns with the SEL curriculum." This lack of cohesion may not have directly impacted implementation, but it did lead to a feeling among teachers that the curriculum was not as fully developed as it could have been. Overall, it will be important to continue to monitor the appropriateness of the materials for the students, ensure that adaptive materials are built into the curriculum, and observe if moving filming activities earlier in the curriculum alleviates some of the feelings of discontinuity.

Teacher Knowledge Gaps. Several teachers reported that they were unsure of the intended learning outcomes for each lesson. One teacher explained, "I feel like the goals were murky at times when answered. I understand the SEL goal, but the PBL goal was confusing and was not given enough depth." Many teachers reported feeling unprepared to teach some of the technical aspects of the curriculum, especially around filmmaking, due to their lack of background knowledge. A teacher explained:

I wish there were some sample answers to the questions we are posing to the students. My limited (mean none) background knowledge of filmmaking makes it difficult to help guide the students when they are unable or unwilling to answer the questions themselves. (RIHS teacher)

Overall, it appears there is a need for more explicit guidance on how to implement the curriculum and what exactly is expected of students, especially as many teachers feel uncertain about the content—particularly around filmmaking—themselves.

Technical Challenges. Throughout implementation, teachers reported technical challenges. Early on, teachers struggled to navigate the teacher's guide and access materials. Some teachers found the organization of the materials to be confusing. One teacher reported, "I wish the PBL breaks were more obvious. I missed the first one since it is down at the bottom of the page and I had to scroll to see it." Another teacher proposed a modification:

I wish the lessons were labeled as 1a.1 so I would know I am on Unit 1, lesson a (Introduction to Documentary) day 1. This would be especially helpful on the Teacher's Guide. As you flip through the Teacher's Guide, I see things like Finding Your Story Day 2 Lesson 2. (RIHS teacher)

A few teachers also reported issues with their Promethean Boards. These early issues impacted teachers' ability to find their flow with teaching. These issues appeared mostly resolved by the second semester. However, then teachers began to

report significant issues with technology, such as connectivity problems with iPads, video clip transfers, and uploading videos to flash drives. Editing in Flexclip, in particular, proved quite challenging for teachers and students. A teacher explained, "Editing was rough. I had to be very hands on. It was difficult for students and they were not interested enough in the project to want to try to take the time to edit the project." The virtual meetings with the production team alleviated some of these difficulties, but the technical aspects of filming did emerge consistently as a pain point for teachers, most of whom had limited knowledge and expertise in filmmaking.

Thurgood Marshall Learning Center

Chronic Absenteeism. The overwhelming impediment to implementation at TMLC was student attendance. All five teachers commented on the impact of low attendance. One teacher explained, "I would decide to teach HATC curriculum on days when I had a majority of my students present. I really wanted to reach the whole group, as opposed to two students." As a result, there were difficulties in moving forward with the curriculum. This situation made it challenging to progress through the material and required reteaching of lessons in some cases. Additionally, because classes at TMLC tend to be smaller than classes in the traditional high schools, missing students really make an impact. A teacher explained:

I had a couple students that were out this month for disciplinary measures. That impacted the class dynamics a bit because the students missing were major contributors to class discussions and participation. As a result, it was a little more difficult implementing the curriculum because we lacked their input, encouragement, and voice in the classroom. (TMLC teacher)

Overall, the lack of consistency in attendance made it harder to maintain momentum and keep all students engaged. Teachers might need to explore additional strategies to keep absent students engaged, perhaps through make-up lessons or alternative activities, to maintain continuity and engagement even when many students are missing.

Missing Materials and Technical Issues. The consolidated curriculum implemented at TMLC was also at times missing resources. One teacher observed, "We were held up because we were missing components in the shortened curriculum. Specifically: Film Guidelines, Making a Plan/Production Guiding Questions, Interview Questions." These gaps in resources meant that more time had to be spent on the curriculum to compensate for the missing parts, further impacting the tight timeline. Additionally, similar to the experience of teachers at RIHS, pervasive technical issues impacted implementation. There were technical issues with the iPads and missing components in the kits. Again, editing posed a significant challenge at TMLC. Teachers reported experiencing issues with the editing website freezing or failing to save edits and content. Another explained, "We were not able to have the Capstone showcase. We only made one video for the class due to the small class size. The students struggled with the tediousness of the editing process." Similar to RIHS, it appears the virtual meetings with the production team alleviated some of these difficulties, but the technical aspects of filming, particularly editing, will likely remain a point of concern for teachers.

Curriculum Materials. On the first monthly survey, teachers reported that some of the PowerPoint slides were too wordy and visually unengaging for their students. A teacher wrote, "Some difficulties my class has faced in implementing the HATC curriculum is students losing interest when they see slides with a lot of words on it!" In addition, some of the case studies were too long. A teacher explained, "The students have commented that the Community Garden example was long. They felt, and I agree, that the elements of Project Based Learning could be taught with a shorter case study." Another teacher explained, "For our kids anyway it was s a little bit too like academic so we had to kind of find a way where we can just break it down in more simple terms for them." It appears teachers were able to adapt, but it will be important to reflect on these concerns if this theme re-emerges during future data collection.

Changes in Class Dynamics. In alternative settings, students transferring into classrooms during the school year is more common, and because classes are smaller this may be disruptive. One teacher reflected:

Because of the variables in our building, we had a key student transfer to a different school, and two additional students added into the classroom because it was the best choice for our building safety. It was very understandable for our building circumstances. However, for the sake of the HATC curriculum, the team comradery wasn't there anymore. It isn't the end of the world but it will take a little more time for the class to gel with the new students as we push forward to finish the project. (TMLC teacher)

This disrupted team dynamic can affect group-based projects, like the documentary, where collaboration is key. Further, in addition to using attendance to guide instruction, TMLC teachers described choosing to implement based on the class mood on an given day. One teacher wrote:

I decide what days to teach HATC based on a couple factors. One is attendance. If I have low attendance, I will choose to teach HATC curriculum another day. Another factor is student involvement. If I feel that students are not in the headspace to participate in HATC activities, I may choose not to do it that day. (TMLC teacher)

The unique dynamics of an alternative setting presented some roadblocks to implementation. Notably, maybe given the flexibility inherent in such a setting, TMLC teachers seemed well adapted to make adjustments as needed.

Adaptations to Curriculum during Implementation

The responsiveness provided by RIMSD administrators is a unique feature of this project. In response to feedback from teachers and parents, RIMSD and CWK agreed that teachers at RIHS could implement HATC four days per week instead of five days per week, which allows one dedicated day per week for Pride Time. Additionally, as requested, RIMSD assigned a course credit for participation in HATC for RIHS students. Further, in response to teacher concerns about filming and editing, RIMSD and CWK set up virtual sessions with the production team to support teachers and students. Finally, based on feedback, the leadership team determined that HATC would not go schoolwide at RIHS in the 2024–2025 school year. The administration informed teachers that only ninth grade RIHS advisories would use HATC in the upcoming year. However, given the successes at TMLC, administrators moved forward with full school implementation for the upcoming year.

Virtual Meetings with the CWK Production Team

In response to RIHS teacher concerns about student disengagement and upcoming filming, CWK began to offer virtual meetings led by their production team in February 2024. At RIHS, these meetings replaced teacher instruction two days per week. Students used the remaining two days per week to engage in independent work on their documentaries. On the first quarterly survey after the addition of virtual sessions (i.e., quarterly survey 3 in March 2024), we asked teachers to describe what impact, if any, the addition of virtual sessions with the production team had on their experience implementing HATC. Overall, respondents reported that the virtual sessions helped to reduce teacher workload and provided important clarification on technical aspects of creating a documentary like developing an idea, filming B-roll, and editing. Teachers presented varied opinions on the effect of these sessions on student engagement.

Most teachers felt that their students valued the opportunity to interact with experts and have their questions answered. One teacher wrote, "It's nice for the students to be able to see and hear [the production team]. I think the access to both has helped a little with engagement." Another teacher explained, "Students are engaged during the virtual sessions with [the production team]. I think they enjoyed seeing their questions being answered by the experts."

However, other teachers continued to struggle with student engagement. A teacher explained:

For me as a teacher it has made things easier. I do not have to try to help students with things that I have no knowledge of. For my students, it has been a negative. They have not made my students more interested in the topic. (RIHS teacher)

Another teacher wrote, "I have appreciated the sessions. I don't believe it has impacted my students." A few teachers identified concerns relating the virtual sessions. Two teachers indicated that the sessions took away from time for students to be working in their projects. One explained, "The informational meet[ings] did take away time from students to record and edit." The other wrote, "It was helpful at first but then became redundant because the students already had very limited time. With only 20 minutes it doesn't give you much time together [to get] things done." The limitation of the length of advisory period appears across teacher responses. The final concern was the sustainability of this practice. A teacher wrote, "I appreciate having help on standby; however, this is not a sustainable accommodation, and therefore, alternative options will be necessary for this curriculum to be successful." Overall, most RIHS teachers (14 of 17; 82%) found these sessions to be "somewhat helpful," "helpful," or "very helpful." Just less than half of teachers (9 of 20; 45%) attended seven to nine sessions. Only two teachers (10%) reported not attending any sessions.

In April, as filming ramped up for TMLC teachers and students, CWK invited TMLC to participate in two virtual sessions with the production team. Most of the teachers (4 of 5) attended one of the two virtual sessions. One teacher attended both sessions. Overall, most teachers (4 of 5) found these sessions to be "helpful," or "very helpful." One teacher explained, "We held a Google meet with [the production team]. This was helpful in clearing up questions that we had and motivated us to continue on our path to complete this project." Another wrote, "We were able to set up a virtual meeting with [the production team] during that meeting, which led to great resources shared and ideas generated!"

Summary

Overall, student engagement proved to be the most significant implementation challenge for RIHS teachers, while at TMLC, chronic absenteeism proved to be the most significant challenge. RIMSD administrators and CWK considered other challenges when planning for the 2024–2025 school year. At RIHS, implementation was limited to ninth grade advisories only. Implementation went schoolwide at TMLC. All participating teachers received a pacing guide along with their scope and sequence, and additional training has been built into the year. It will be important to compare the impediments identified this year to next year's, in order to understand the impact of these changes.

IMPLEMENTATION SUCCESSES AND PROGRAM SATISFACTION

Implementation Successes

On each quarterly/monthly survey and in teacher interviews, we asked teachers to identify what was going well in their implementation. We consolidated responses across surveys and interviews to create a description of the key themes that emerged.

Students Enjoyed Hands-on, Interactive Activities

Teachers reported in open-ended responses and interviews that students seemed to most enjoy the hands-on, interactive activities in the curriculum. Even as RIHS struggled with student engagement throughout implementation, teachers felt

the students most enjoyed activities, especially compared to the slides or talk and turn discussions. Activities like Shark Tank⁷, creating word art, and SEL Jeopardy were especially popular among the students. Two teachers explained:

I can tell you one good thing though, that did happen when we played Jeopardy, and you'll probably hear this from other teachers two days in a row, we played Jeopardy. The kids really responded to that because it was fun playing a game and class is fun. Any curriculum ideas you can come up with playing Jeopardy or doing other fun stuff, the kids will respond much better. (RIHS teacher)

It started off well. I know we did some more fun activities. That Shark Tank thing was fun. That stuff was fun...[I] think it started off great. And then when it got into a lot of, oh, chat with somebody or write down your feelings or tell me what you're thinking. They weren't having that. (RIHS teacher)

Teachers also reported that students were excited about the iPads and the filming equipment. The delay (in the curriculum sequence) in using the equipment was a key driver of disengagement. To mitigate this, a teacher at TMLC used a unique strategy to keep students engaged. Each day, the teacher allowed students to open the yellow box (filming equipment was stored in large yellow boxes) and learn about a piece of equipment. The students began calling HATC "the Yellow Box Project." They used the yellow box as a metaphor. They were opening the box and also opening up themselves to tell their stories. This name resonated more with the students who did not like the name "How are the Children" expressing that they felt like *they* were a project. Overall, according to teachers, students enjoyed the curriculum most when it felt less like "work" and more as an opportunity for creativity and social interaction. As an RIHS teacher explained, "Students enjoyed the more hands on things. They really brightened up and showed a lot more enthusiasm."

The Filming Process

Despite early concerns raised by teachers that filmmaking would not be engaging to students because of the ubiquity of smart devices, by the time filming began, about half of teachers at RIHS felt that students were excited by the opportunity to create a film. As described above, 13 of 20 teachers at RIHS and three of five teachers at TMLC were able to submit a film. At TMLC, despite persistent issues with student absenteeism, most teachers reported that their students were engaged with the filming process. Illustrative quotes are presented below.

The part that really got them back was the documentary part because we needed a lot of theory, just discussions and all that. At some point I was almost losing them...But when I introduced the documentary part. All of them got back. So, they were eager to learn about, filmmaking and all that. (RIHS teacher)

...There was more participation when we started to get into our brainstorming sessions of let's try to think of a few things even before we narrow it down to one thing that we could start developing story-like ideas and story formats for, there was a lot of good ideas shared... But I would say looking back that those were some more of the lively discussions... (RIHS teacher)

Now that we're actually in the video aspect of it, I do actually have more involvement than I did in the beginning... I've had little groups emerge as leaders because of that aspect of it. That's why I went back to

⁷ The Shark Tank activities was designed to help students identify the characteristics of an effective team. For this activity, students divided into small groups and developed a business idea to solve a specific problem. Teams then developed persuasive pitches which they presented to their classmates.

the curriculum of if it had been brought throughout and they did these things in stages, I actually think we would've had more buy-in.... (RIHS teacher)

I can't help smile. I am just so proud of them. I'm so proud of them. Hear there was a minute we were a little bit worried that we wouldn't have anything and that it was just like, 'come on guys'. I think there was just that nerve about ripping that band aid off and just start filming things...Once they got out there and they started on that B roll piece and they're like, 'oh, well let's do this and let's do that'. And then they got their energy back up and then it was like, 'now what questions are we going to ask?' (TMLC teacher)

Unfortunately, some teachers were unable to re-engage their students by the time filming began. One teacher explained:

The biggest challenge is still lack of interest. I have one student that seems like they may participate more, now that the course will count for a partial credit...and the film-making process is of no interest to them so it is tough to motivate a majority of my students to participate. As I said before, I feel like retention of all the filming aspects will be low. (RIHS teacher)

However, for the teachers who were able to maintain student engagement and buy-in, the peer-to-peer production process empowered students to work together and to create something they could take pride in. The best descriptions of the successes of filming come from the teachers themselves. Below are illustrative quotes.

I heard from some of the students, it's not often that they get to just talk about themselves in class, you know? They really have to pull from within. I think that was scary for some of them. But I feel like once they got to understand that they, they were the main characters of what this is about. If they could admit it or not, I feel like that was a big plus. It was a big win... they really got to see [a] project from start to finish, despite some of them hating or some of them being mad, or some of them, regardless of their attitudes, we met the deadline. We did it and they got to see it. And for some of them, I think that they don't know. They don't know what that means. They don't know how to articulate what just happened. But when we showed the video in our class, I think that when I was watching our students' faces and they were happy, I could see it in their eyes that they were like, this is stuff that this guy's been talking about, and we get to see it. (TMLC teacher)

So, the part that they really participated in was maybe the part that we had preparation for the interview. They participated in that, the discussions, they did all that for that. They were very excited about that. But when we came to the part where they would go out and collect all the stories, the camera students, I think they somehow stayed away for a little bit. And when we were done collecting all these stories, they came back again because they were so happy after, again, even watch all that, we got the raw videos that we got. They were so happy to see them again...But I would say that they were generally excited about the whole documentary part. (RIHS teacher)

I think they're; I'm going to say this because they're going to be embarrassed, but I think they're kind of proud of themselves. I really think they're a little bit proud of themselves. And I also got to send happy text messages to the parent of my student who did the interview. I have this great picture of him sitting there behind the camera filming the interview. And then I got the picture of the kids putting the equipment together. And so, there's really been some bright spots like them running around and actually talking about how they're going to film their B roll. And of course, they want to do their little first person walking into the building and all of that stuff. And the answers that they gave to the questions and some of the maturity they showed. I didn't ask their adult interview. They had to ask their adult interview. They had to decide

who they were going to interview. They had to call and ask them. They had to talk about what they wanted to ask for the adult in their interview. (TMLC teacher growing emotional as they explained)

Class Discussion and Reflections

Although many teachers struggled with the SEL units and particularly with the talk and turn style activities, some teachers found the opportunities for discussion and reflection to be really impactful. Illustrative quotes are presented below.

I don't know what it looks like for a teenager, but from what I've gathered and just my own experience as a [teacher], I feel like the program really gave the student a chance to talk about a problem that they feel they're going through and discuss it amongst themselves, how they think the problem can be solved. And I saw them try to do bits of that. They were trying to talk about this whole appreciation of the diversity that they come with. They were trying to highlight certain beautiful things in their backgrounds. So that was really cool for me... I believe the curriculum in so many ways also acted as an eyeopener. It started conversations that people really need to have. It gave structures or it gave us the vocabulary to have these conversations. That is really huge. You might say you might be having a problem with communication, but you don't know what is communication or you might be having a problem with say the responsible decision making, just the basic vocabulary and just talking about things like essential agreements. Having students get used to this vocabulary in conversations is so easy. And I believe one step to solving any problem is just having the language to discuss it. (RIHS teacher)

They did understand SEL and were able to share about it, and hopefully that led to some growth in them. But even though that group been together four years, there were interactions between students that really hadn't interacted in four years. So that was my biggest just kind of classroom positive from this curriculum was doing a lot more of this sharing on a regular basis and talking about a wide variety of different things and scenarios and such...So that was one thing I did like about implementing the curriculum was that it did kind of, I don't want to say force, but did create opportunities to get the students to interact that hadn't been, and now I even see some of them talking to each other in the hallway when I hadn't really before. So, I wouldn't go as far as say that this created new friendships, but it's definitely created more connections. They understand like, oh, this person that's been sitting in this room with me for four years, I share things with and can talk to now. (RIHS teacher)

Our kids are very open. We got into some really, I can't even tell you, some really good discussions...And a lot of that was brought out in having the conversations off those prompts and things in the SEL [lessons]... And a lot of that was brought out in having the conversations of those prompts and things in the SEL (TMLC teacher)

They have to say that the stories they have to share with their peers...And as a teacher, I feel it helped me solve a lot of problems within my class, especially on relationships. I talked with my students. I was very free with them. I created a very good environment where they could share, and they realized that there's some things that they might have been doing before that were very wrong and they have to change or they changed. So, I feel that the program was a very good addition to the high school. (RIHS teacher)

...at first everybody was just scared. Everybody was scared, and most people were just like, no, no, I'm not being on camera. I'm not going to get deep. I'm not going to share nothing... But once those moments where

the ball was rolling, you see that the students are being impacted and that they see that their ideas are being transformed into some kind of creative shot or all the different kind of creative modes of creative expression that I used. (TMLC teacher)

Summary

Overall, for the teachers able to maintain student engagement, HATC appeared to be an exciting opportunity for students that brought classrooms together and left students with a feeling of pride. Notably, the TMLC teachers who were able to overcome absenteeism issues, reported high engagement and success in their classrooms. It may be worthwhile to explore what about those classrooms facilitated more success. Perhaps smaller class sizes or stronger relationships between teachers and students plays an important role, as illustrated by what this TMLC teacher explained:

The difference between us and the high school is I don't see a hundred bazillion kids all day. So, I already know all my kids. Some of my kids I've had for four years already...So even if I haven't had them, I know them [because] we're smaller. So, we have the opportunity to develop relationships with students and have those conversations. (TMLC teacher)

Program Satisfaction

Satisfaction with SEL and PBL Content and Materials

When asked about their satisfaction with the SEL units and PBL breaks, about half of RIHS teachers were satisfied with the pace of lessons, the online portal, the teacher guide, the student workbook, the PowerPoint Slides, and the activities. Similarly about half of teachers felt neutral or agreed that the curriculum was easy to implement, that they enjoyed implementing the curriculum, and that it met the needs of their students.

At TMLC, most teachers were satisfied with the pace of lessons, the online portal, the teacher guide, the student workbook, the PowerPoint Slides, and the activities. Additionally, most teachers felt neutral or agreed that the curriculum was easy to implement, that they enjoyed implementing the curriculum, and that it met the needs of their students.

Interest in Continued Use of HATC

On each quarterly/monthly survey, we asked teachers to report their interest in continuing to use the curriculum in the next school year (2024–2025). On quarterly survey 1 in September 2023, RIHS teachers were fairly evenly split on their interest in continuing to use the curriculum (Figure 8). Half of teachers (50%; 10 of 20 respondents) were "moderately interested" or "interested." By quarterly survey 4 in May 2024, half of teachers (50%; 10 of 20) indicated they still maintained some level of interest, slightly to very, in using the curriculum again. Notably, half of RIHS indicated they were "not at all interested" in using the curriculum again. These results reflect the mixed views that arise across the implementation results of RIHS teachers. This pattern of results may best be summed up by the following two quotes.

I liked the revisions that took place throughout the year and it makes me hopeful for the continued alteration to best suit our students and teachers. I think SEL is important and getting some form of formal education on SEL could be beneficial to the youths. (RIHS teacher)

The HATC curriculum wore on my own social/emotional health this year. I did not feel we were given the support to implement the curriculum with fidelity. We were not given necessary time to plan for the curriculum. The curriculum was also too technical-heavy, especially at the beginning of the year. The social/emotional piece felt tacked on, not the driving force it was intended to be. (RIHS teacher)



Not at all interested Slightly interested Moderately interested Interested Very interested

FIGURE 8. RIHS TEACHERS INTEREST IN CONTINUING USE OF HATC IN THE FOLLOWING SCHOOL YEAR Note. *n* = 20.

Continued interest varied a bit less at TMLC. On monthly survey 1 in February 2024, all TMLC teachers were at least "moderately interested" in using the curriculum again in the following academic year. Four out of five teachers were "interested" or "very interested" in using the curriculum again. On monthly survey 4 in May 2024, all teachers were still at least "moderately interested" in using the curriculum again. Overall, these findings are also indicative of the larger pattern of implementation results for TMLC teachers. Although, teachers at TMLC faced challenges, namely low student attendance and technical issues, it appears that most teachers at TMLC were able to maintain a positive interest in the HATC curriculum.

COMPARISON OF HATC AND BAU ACTIVITIES

In this section, we present a comparison of the HATC and BAU activities taking place at RIHS and TMLC. For RIHS, we describe the time teachers spent preparing to implement HATC compared to the time BAU teachers spent preparing for advisory and we report on the frequency of typical advisory activities (e.g., academic support) taking place in *HATC* and BAU classrooms. For TMLC, we report on the time *HATC* teachers spent preparing to implement the curriculum.

Rock Island High School

On each quarterly survey, we asked both *HATC* and BAU teachers at RIHS to report the amount of time they spent prepping for their advisory periods. On quarterly survey 1 in September 2023, *HATC* and BAU teachers reported spending comparable time preparing for their advisories (Figure 9). Most teachers reported spending less than one hour per week preparing to teach HATC (60%; 12 of 20 respondents) or BAU advisory (71%; 13 of 18 respondents). By quarterly survey 2 in December 2023, most *HATC* teachers reported spending less than one hour (47%; 9 of 19 respondents) or one to three hours (47%; 9 of 19 respondents) per week preparing for advisory compared to the majority of BAU teachers (84%; 16 of 19 respondents) who reported spending less than one hour per week. The difference in prep time became much more pronounced in the second semester of implementation. Most *HATC* teachers on quarterly survey 3 in March 2024 (74%; 14 of 19 respondents) and quarterly survey 4 in May 2024 (70%, 14 of 20 respondents) reported spending one to three hours preparing compared to most BAU teachers (63%; 12 of 19 respondents; 83%; 15 of 18 respondents, respectively) who continued to report spending less than one hour per week preparing.

Interestingly, quarterly survey 3 (March 2024) coincided with the production team's takeover of instruction twice per week. It may be that even with this additional support, the demands of filming placed an added burden on teachers. There was an uptick in the number of BAU teachers (37%; 7 of 19 respondents) who reported spending one to three hours per week preparing on quarterly survey 3. It is possible that when the new semester starts, additional preparation time is required. Overall, it appears that *HATC* teachers spent more time preparing to implement the HATC curriculum, especially in the second semester, than BAU teachers spent preparing for advisory. It may be valuable in future surveys or interviews to have teachers provide more information about their preparation, should we continue to see this trend. It may also be valuable to consider an additional means of compensating teachers for this time. As one teacher noted, "I think teachers should get paid extra because in the past I have had to barely do anything during that advisory time." A TMLC teacher said, "My recommendations are teachers need more training [and] teachers need to be paid. You're just not going to get them to do very much if they don't get paid." However, with HATC only being implemented in ninth grade going forward, this may pose less of a concern."



Less than one hour per week 1-3 hours per week 4-7 hours per week 7+ hours

FIGURE 9. RIHS HATC AND BAU TEACHERS' REPORTED ADVISORY PREPARATION TIME

We also asked *HATC* and BAU teachers to estimate how often they engaged in specific activities that RIHS administrators identified as common for RIHS advisory (Table 12). Across both groups, teachers most commonly reported reviewing grades with students weekly and providing academic support weekly or daily. More BAU teachers were able to provide academic support daily than *HATC* teachers because *HATC* teachers were implementing HATC four days per week.

TABLE 14. RIHS HATC AND BAU TEACHERS REPORT OF ADVISORY ACTIVITIES

| | | September 2023 | | | | | |
|------------------------------------|-------------------|----------------|-----------|--------------|--------|-------|--|
| Advisory activity | Group | Never | Quarterly | Monthly | Weekly | Daily | |
| Poview course grades with students | HATC ª | - | - | - | - | - | |
| Review course grades with students | BAU (n = 21) | 5% | 10% | 14% | 71% | 0% | |
| Provido ocodomia support | HATC ^a | - | - | - | - | - | |
| Provide academic support | BAU (n = 21) | 5% | 5% | 10% | 35% | 45% | |
| | | | October | – Decembe | r 2023 | | |
| Advisory activity | Group | Never | Quarterly | Monthly | Weekly | Daily | |
| Review course grades with students | HATC (n = 19) | 21% | 11% | 16% | 53% | 0% | |
| | BAU (n = 19) | 5% | 11% | 21% | 53% | 11% | |
| Provido acadomic support | HATC (n = 19) | 21% | 5% | 11% | 58% | 5% | |
| Frovide academic support | BAU (n = 19) | 5% | 0% | 0% | 42% | 53% | |
| | | | Janua | ry – March 2 | 024 | | |
| Advisory activity | Group | Never | Quarterly | Monthly | Weekly | Daily | |
| Review course grades with students | HATC (n = 19) | 5% | 21% | 11% | 58% | 5% | |
| Review course grades with statents | BAU (n = 19) | 5% | 11% | 16% | 68% | 0% | |
| Provide academic support | HATC (n = 19) | 11% | 16% | 0% | 58% | 16% | |
| | BAU (n = 19) | 0% | 5% | 16% | 32% | 47% | |
| | | | Apr | il – May 202 | 4 | | |
| Advisory activity | Group | Never | Quarterly | Monthly | Weekly | Daily | |
| Review course grades with students | HATC (n = 20) | 10% | 10% | 35% | 45% | 0% | |
| Review course grades with students | BAU (n = 18) | 11% | 6% | 22% | 56% | 6% | |
| Provide academic support | HATC (n = 20) | 20% | 0% | 15% | 65% | 0% | |
| | BAU (n = 18) | 6% | 0% | 11% | 56% | 28% | |
| | | | | | | | |

^a In September 2023, we did not ask HATC teachers to report on their advisory activities because the expectation was that HATC teachers were implementing HATC 5 days per week at that time.

Note. Shading indicates a higher proportion of BAU teachers implementing an activity daily.

To provide a contrast, we asked BAU teachers to reflect on if they thought their students made productive use of their advisory time (Figure 10). Teachers' opinions varied. Across surveys, nearly half or more than half of teachers (38%-53%; 8-10 of 18-21 respondents) "agreed" or "strongly agreed" that their students used their advisory time productively and about half of them felt (47%-56%; 9-13 of 18-21 respondents) "neutral" or "disagreed/strongly disagreed." This split between teachers was also in the open-ended responses and interviews. Most teachers appreciate that advisory provides a time for teachers to provide additional academic support to students and for students to seek out help and complete missing work. Overall, while teachers find Pride Time valuable for academic help, some teachers would appreciate if the system offered more structure to ensure better use of time and greater accountability, especially for students who do not utilize the time effectively. Teachers suggested activities like SAT preparation, study skills, note-taking, organization, career exploration, financial literacy, and community-building.

EFFECTIVENESS OF HATC CURRICULUM

However, others felt that advisory works fine as it is currently structured. One teacher explained, "This time can be very useful. Having time during the day is very beneficial to some of the students since they may not be able/want to come in early or stay late to make up something." There is also an understanding that advisory time serves as a valuable opportunity for students to recharge, catch up, and engage socially. One teacher explained, "Students need a break during the school day and that is one use of advisory/homeroom. They regard it as a time to relax and socialize and also do homework to get caught up if needed." Another explained they used advisory to, "...build rapport with students...Sometimes you just talk about what's going on and what they are struggling with." Given these responses, teachers may appreciate a dedicated day during advisory aimed at student development. Activities could include SEL or career readiness. Not only would this provide the structure that some teachers seek, but activities like these could also function as opportunities for teachers to develop rapport with their students and learn about the struggles and goals.



Strongly disagree Disagree Neutral Agree Strongly agree

% Responding in Each Category

FIGURE 10. BAU TEACHERS' RATINGS OF IF STUDENTS USE ADVISORY TIME PRODUCTIVELY

Thurgood Marshall Learning Center

On each monthly survey, we asked *HATC* teachers at TMLC to report the amount of time they spent prepping to implement HATC and how much time they typically used for instruction. As a reminder, the BAU group at TMLC continued teaching their typical second block coursework during implementation. The data collected from *HATC* teachers

will give an idea of the added commitment required to implement the HATC curriculum and the amount of typical instruction that HATC replaced.

On monthly survey 1 in February 2024, three out of five teachers reported spending less that one hour per week on preparation, and the remaining two teachers reported spending one to three hours per week on preparation. Similar to RIHS teachers, as the implementation progressed, teacher prep time did as well. On monthly surveys 2 and 3, four out of five teachers reported spending one to three hours preparing per week. By the end of implementation in May 2024, two out of five teachers reported spending one to three hours preparing and two out of five reported spending four to seven hours. It is notable that even with a consolidated curriculum, TMLC teachers appeared to spend similar amounts of time preparing as RIHS teachers did across their full-year of implementation. Going forward at TMLC, it will be important to consider the impact on teachers of additional prep time on top of what is already needed for their typical second block instruction.

Summary of Classroom Implementation of HATC and BAU

Overall, at RIHS, *HATC* teachers spent more time preparing to implement the HATC curriculum, especially in the second semester, than BAU teachers spent preparing for advisory. Across both schools, preparation time for HATC increased as the curriculum progressed. By the end of implementation, most teachers were spending one to three hours on preparation.

Chapter 4. Impact of HATC on Teacher Intermediate Outcomes

In this chapter, we report findings related to the impact of HATC on the following teacher intermediate outcomes, as listed in the logic model.

- Positive relationship in the classroom environment
- Teacher well-being
- Teacher SE competencies
- Teacher job satisfaction

SAMPLE AND ANALYSIS METHODS

We collected data for these outcomes on the third or fourth teacher survey of the school year (March–May 2024) (see <u>Chapter 2</u> for additional information on each survey scale). The analysis pools together responses from teachers in both RIHS and TMLC for any teacher who provided a response to the given survey question. As described in the <u>Analysis</u> <u>Methods</u> section of Chapter 2, to evaluate impacts on teacher survey outcomes, we used a linear regression model that estimated the difference between *HATC* and BAU in average responses, adjusting for effect of chance imbalance between conditions on teacher-level baseline characteristics, including teacher demographics, beliefs about SEL, and classroom averages of student characteristics in their advisory classes. The model included a variable for school, which was the blocking variable.

We evaluated equivalence of *HATC* and BAU teachers in the sample in terms of the similarity of their group-average scores on a scale measuring teachers' beliefs about social and emotional learning (Brackett et al., 2012). The difference is expressed in pooled standard deviation units of the score distribution.

RESULTS ON IMPACT OF HATC ON TEACHER INTERMEDIATE OUTCOMES

Toward the end of HATC implementation, teachers in the *HATC* group reported lower levels of student *involvement* (the extent to which students are attentive and interested in class activities, participate in discussions, and do additional work on their own) and student *affiliation* (the friendship students feel for each other, as expressed by getting to know each other, helping each other complete work, and enjoying working together), than teachers in the BAU group, as measured by the Classroom Environment Scale (CES) (Trickett & Moos, 2002).⁸ The negative impacts on these two subscales reached statistical significance (Standardized Effect Size [ES] = -1.18, *p* = .002 for affiliation; ES = -1.02, *p* = .006). Additionally, teachers in the *HATC* group reported lower levels of *teacher support* (the help and friendship the teacher shows toward students; how much the teacher talks openly with students, trusts them, and is interested in their ideas) than teachers in the control group, but this impact did not reach statistical significance (ES = -0.46, *p* = .25) (Table 15).

We do not observe statistically significant differences between *HATC* and control teachers' responses for any of the remaining outcomes (Table 15).

⁸ Teachers in RIHS were asked to respond to this scale based on their experiences in their advisory period, and teachers in TMLC were asked to respond to this scale based on their experiences in their second block.

TABLE 15. IMPACT OF HATC ON TEACHER INTERMEDIATE OUTCOMES

| Subscale | Response choices | No. of teachers BAU | No. of teachers HATC | BAU mean | Estimated treatment meanª | Effect size | <i>p</i> value | Baseline equivalence (in effect size units) |
|----------------------------|---|---------------------------|----------------------------|-------------|---------------------------------|----------------|----------------|--|
| Classroom Environme | ent Scale – Relationship Dime | ension | | | | | í. | |
| Affiliation | True =1, False =0 | 22 | 19 | 0.76 | 0.49 | -1.18 | .002 | -0.06 |
| Involvement | True =1, False =0 | 22 | 19 | 0.75 | 0.47 | -1.02 | .006 | -0.06 |
| Teacher support | True =1, False =0 | 22 | 19 | 0.83 | 0.78 | -0.46 | .250 | -0.06 |
| Maslach Burnout Inve | entory (MBI) for Educators | | | | | | | |
| Depersonalization | Never=1, A few times a year or less=2, Once a month or less=3, A few times a month=4, Once a week=5, A few times a week=6, Every day=7 | 22 | 23 | 1.85 | 2.29 | 0.46 | .190 | 0.24 |
| Emotional exhaustion | Never=1, A few times a year or less=2, Once a month or less=3, A few times a month=4, Once a week=5, A few times a week=6, Every day=7 | 22 | 23 | 3.11 | 3.60 | 0.44 | .133 | 0.24 |
| Personal accomplishment | Never=1, A few times a year or less=2, Once a month or less=3, A few times a month=4, Once a week=5, A few times a week=6, Every day=7 | 22 | 23 | 5.98 | 5.80 | -0.27 | .456 | 0.24 |
| Educator Social and E | motional Competencies | | | | | | | |
| Social awareness | Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly agree=5 | 21 | 24 | 4.35 | 4.36 | 0.04 | .914 | 0.13 |
| Self-awareness | Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly agree=5 | 21 | 24 | 4.33 | 4.26 | -0.13 | .701 | 0.13 |
| Self-management | Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly agree=5 | 21 | 24 | 4.14 | 4.03 | -0.25 | .461 | 0.13 |
| Relationship skills | Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly agree=5 | 21 | 24 | 4.33 | 4.12 | -0.46 | .200 | 0.13 |

| Subscale | Response choices | No. of teachers BAU | No. of teachers HATC | BAU mean | Estimated treatment meanª | Effect size | <i>p</i> value | Baseline equivalence (in effect size units) |
|--------------------------------|--|---------------------------|----------------------------|-------------|---------------------------------|----------------|----------------|--|
| Responsible decision making | Strongly disagree=1, Disagree=2, Neutral=3, Agree=4, Strongly agree=5 | 21 | 24 | 4.14 | 4.04 | -0.18 | .604 | 0.13 |
| Teacher Job Satisfact | Teacher Job Satisfaction | | | | | | | |
| Job satisfaction | Never or almost never=0, Sometimes=1, Often=2, Very often=3 | 21 | 25 | 3.31 | 3.09 | -0.35 | .353 | 0.13 |

^aThe estimated treatment mean is the BAU mean plus the estimated impact from the benchmark model reported in scale score units.

Note. Higher scores on the emotional exhaustion and depersonalization subscales of the MBI correspond to greater degree of experienced burnout. Lower scores on the personal accomplishment subscale of the MBI correspond to greater degree of experienced burnout.

Chapter 5. Impact on Student Outcomes

In this chapter, we present findings related to the impact of HATC on student outcomes, including SE competencies, number of absences from school, disciplinary referrals, and academic achievement. For each outcome, we describe the outcome measure and analytic sample, and highlight the main findings.

The analytic sample for SE competencies, absences, disciplinary referrals, and academic achievement includes students from both RIHS and TMLC pooled together. For each outcome, schools already assigned students to rosters of participating teachers before we conducted random assignment. Therefore, we only included these students in analysis (that is, we omitted from our analysis any data for students that joined the study classes after random assignment). We also removed from analysis any data for students without a posttest and counted those students as having attritted.

Given the primacy of the impact of HATC on student SE competencies, as well as some complexities in the data collection measure, we conducted a more thorough investigation of the impact overall, as well as for various student groups and alternative versions of the DESSA form, as described in more detail below.

IMPACT ON SOCIAL-EMOTIONAL COMPETENCIES

Outcome and Analytic Sample Size of Main Result

As described in <u>Chapter 2</u>, we measured students' SE competencies using the DESSA-High School Edition (DESSA-HSE), a CASEL-aligned suite of SEL assessments for students in grades 9–12 (Aperture Education, 2022). We used two versions of the DESSA-HSE: the DESSA-student-self rating assessment (DESSA-SSR) and the DESSA-teacher rated assessment (DESSA-TR). The DESSA-SSR consists of 45 items across seven subscales. The DESSA-TR is a short eight-item assessment that takes teachers approximately one minute to rate each student. It is primarily used as a SE screening tool.

In this experiment, teachers asked their students in their advisory periods/second block to respond to the DESSA-SSR at pretest and posttest. Additionally, we asked teachers to rate all of the students in their advisory period/second block on the DESSA-TR at posttest only. Therefore, for analysis, we could calculate student posttest scores in one of three ways (each student posttest was based on exactly one of these approaches).

- (a) If the only available posttest score is the DESSA-SSR, then only that score is used.
- (b) If the only available posttest score is the DESSA-TR, then only that score is used.
- (c) If the scores in (a) and (b) are both available, then the average of both is used.

We rescaled posttest scores due to their different lengths. We z-transformed the DESSA-SSR scores within each grade by expressing them in control standard deviation units for the grade level. Likewise, we z-transformed the DESSA-TR scores within each grade by expressing them in control standard deviation units for the grade level. As a result, for each version of the DESSA, we expressed scores in standard deviation units away from the average performance of the control group for the grade level. For the main "benchmark" analysis of the effect of HATC on student SEL, as noted above, if a student had DESSA-SSR and DESSA-TR scores, we averaged the z-scores, and used that as the outcome. We refer to such averaged scores as "z-score deviates". The effect size used to summarize impact is expressed in standard deviation units of posttest scores pooled across conditions.

Overall, we obtained posttest scores for students from 25 of 26 teachers randomized to *HATC* and all 27 teachers randomized to BAU. We obtained outcomes for 303 of 387 students on baseline rosters of teachers randomized to *HATC*, and 329 of 405 students on baseline rosters of teachers randomized to BAU. The (i) full attrition calculation, (ii) baseline

equivalence for the study sample based on rosters received, and (iii) baseline equivalence for the sample with real (unimputed) baseline "pretest" values for individuals who also have a posttest are provided in Supplement Section 1 (to support WWC review). The levels of attrition are low enough, at the teacher and student levels, to allow the use of dummy variable imputation methods (WWC, 2022; Puma et al., 2009) for missing values of covariates including the pretest. With dummy variable imputation, we set the missing value for each covariate to zero. A second variable indicates the cases for which we imputed the zero-value for that covariate. Student demographics for the analytic sample for the main analysis of DESSA scores are in Table 16.

| Values | НАТС | BAU | Total |
|---|------|-----|-------|
| Total students | 303 | 329 | 632 |
| Teachers assigned to condition | 25 | 27 | 52 |
| School (n = 632) | | | |
| Rock Island High School | 276 | 311 | 587 |
| Thurgood Marshall Learning Center | 27 | 18 | 45 |
| Student gender (n = 632) | | | |
| Male | 156 | 167 | 323 |
| Female | 147 | 162 | 309 |
| Student ethnicity (n = 623) | | | |
| Hispanic | 42 | 60 | 102 |
| Non-Hispanic | 254 | 267 | 521 |
| Student race (n = 632) | | | |
| Asian | 34 | 22 | 56 |
| Black | 100 | 90 | 190 |
| Multiracial | 28 | 35 | 63 |
| Native American | 1 | 5 | 6 |
| White | 140 | 177 | 317 |
| Student socioeconomic status (n = 623) | | | |
| Receiving fee waiver * | 160 | 172 | 332 |
| Not receiving fee waiver | 136 | 155 | 291 |
| Student limited English proficiency (n = 623) | | | |
| Students with limited English proficiency | 54 | 28 | 82 |
| Student without limited English proficiency | 242 | 299 | 541 |

TABLE 16. STUDENT DEMOGRAPHICS OF ANALYTIC SAMPLE FOR DESSA

^a Illinois law requires schools to waive school fees for students who are experiencing homelessness or are low-income. Note. BAU is the "Business as Usual" (i.e., control) condition.

Main Impact Result for SE Competencies

Results of the main analysis of the impact of HATC on SE competencies, as measured using DESSA scores, are in Table 17. The "unadjusted effect size" of -.11 is the standardized mean difference between conditions in the outcome, divided by the pooled standard deviation of the distribution of the posttest scores. The "adjusted effect size" is the estimate of impact from the benchmark impact model, divided by the pooled standard deviation of the posttest scores. This adjusted value is the main result. The impact is in the negative direction, but it does not reach conventional levels of statistical significance (i.e., p < .05). (The full set of results for the main impact model are in Supplement Section 2.) We conclude that HATC had no impact on DESSA scores for the sample as a whole.

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|-------------|-----------|-------|------------------------|--------------------|--------------------|----------------|----------------|------------------------|
| Unadjusted | BAU | -0.04 | 0.86 | 329 | 27 | 0.11 | 115 | 10/ |
| effect size | HATC | -0.14 | 0.95 | 303 | 25 | -0.11 | .415 | -4 /0 |
| Adjusted | BAU | -0.04 | | | | 0.10 | 1/7 | 00/ |
| effect size | HATC | -0.21 | | | | -0.19 | .167 | -8% |

TABLE 17. IMPACT OF HATC ON STUDENT DESSA OUTCOMES

Note. BAU is the "Business as Usual" (i.e., control) condition. We obtained the *p* value for the unadjusted effect size using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

To evaluate the stability (robustness) of the results, we analyzed the impact of HATC on DESSA using several different approaches. We summarize the results in Supplement Section 3. The first five models progressively include more covariates. Models 6 and 7 include only students who have a real (unimputed) pretest and posttest score. The seven results are all similar, showing a small negative estimate of average effect, but none reaches statistical significance.

We also examined impacts on student-rated DESSA scores (regardless of whether a student also had a teacher-rating [n = 498 students]) and on teacher-rated DESSA scores (regardless of whether a student also had a self-rated score [n = 611 students]).⁹ The (i) full attrition calculation, (ii) baseline equivalence for the study sample based on rosters received, and (iii) baseline equivalence for the sample with real (unimputed) baseline "pretest" values for individuals who also have a posttest are provided for both of these results in Supplement Section 1 (to support WWC review). The full set of results for the main impact models for both of these results are in Supplement Section 2.

Results of Moderating Variables

In addition to evaluating the average impact of HATC on DESSA, this work examined whether impact varied across important student groups. We summarize the results in Table 18. The moderating characteristic is in the first column. The impact estimate for the reference group has a ^ in the column 'Interpretation of the estimated effect'. The estimate of *additional impact* for the group to which the reference group is being compared is in column 'Estimated effect (SE)'. For the

⁹ Among the 632 students with either SSR-DESSA or TR-DESSA posttest scores (or both), we removed posttest scores for six American Indian students because their scores were exerting an undue influence on the results. The counts for the analyses noted here (498 and 611) are limited to the sample after removal of posttest scores of these six students.

full sample, we observe no statistically significant differences in impact between groups (by gender, race and ethnicity, socioeconomic status, limited English proficiency, experience level of the teacher based on number of years teaching, and a teacher's incoming beliefs about SEL).

TABLE 18. DIFFERENCES IN IMPACT OF HATC ON DESSA SCORES ACROSS MODERATING VARIABLES

| Moderator | Interpretation of the estimated effect | Estimated effect (SE) | p value |
|--|---|-----------------------|---------|
| Student gender | Effect for females ^ | -0.17 (0.14) | .233 |
| Student gender | Added effect for males | 0.00 (0.13) | .992 |
| Student ethnicity | Effect for Non-Hispanic students ^ | 0.17 (0.13) | .813 |
| Student ethnicity | Added effect for Hispanic students | 0.04 (0.18) | .808 |
| | Effect for White students ^ | -0.24 (0.14) | .101 |
| Student race | Added effect for Black students | 0.10 (0.15) | .504 |
| | Added effect for Asian students | -0.02 (0.26) | .930 |
| | Added effect for multiracial students | 0.23 (0.22) | .305 |
| School | Effect for Thurgood Marshall Learning Center ^ | -0.43(0.36) | .239 |
| | Added effect for students in Rock Island High School | 0.29 (0.38) | .446 |
| Student sociooconomic status | Effect for students not receiving fee waiver ^ | -0.16 (0.14) | .264 |
| Student socioeconomic status | Added effect for students receiving fee waiver | -0.01 (0.13) | .958 |
| limited English proficiency (LEP) status | Effect for students without LEP ^ | -0.19 (0.13) | .133 |
| Limited English proficiency (EEF) status | Added effect for students with LEP | 0.41 (0.37) | .280 |
| Dissiplinary referrals | Effect of no disciplinary referrals ^ | -0.15 (0.13) | .248 |
| | Added effect for each additional disciplinary referral | -0.01 (0.06) | .217 |
| Vears of teaching experience | Effect for teacher with average years of teaching experience $^{\wedge}$ | -0.16(0.12) | .199 |
| rears of teaching experience | Added effect for each additional year teaching | -0.01 (0.01) | .465 |
| Toochar SEL ballof scala | Effect for teacher with average score on SEL belief scale at baseline $^{\wedge}$ | -0.17(0.12) | .171 |
| | Added effect for each unit-increase in teacher SEL belief scale at baseline | -0.07 (0.27) | .799 |

[^] Indicates the reference group for the analysis. The estimate of additional effect for the group to which the reference group is being compared is given in column Estimated effect (standard error (SE)).

Note. Estimates represent the change in impact on DESSA posttest (in z-score deviate units, as described earlier in this chapter) for each unit increase in the moderator variable.

Impact Results on SE Competency Subscales

The next stage of evaluating impacts on DESSA consisted of examining the results by subscale. The sample consists of all students with a DESSA-SSR posttest score, as these subscale scores are only available for the DESSA-SSR, and not for the DESSA-TR. We used the same covariates in the impact model as we used for the main analysis of impact. We used dummy variable imputation for students with missing pretest scores.

The results are displayed in Table 19 through Table 25. None of the adjusted effect size estimates reach conventional levels of statistical significance. However, it is noteworthy that even though none of the impacts on subscale competencies reaches statistical significance, all except one (self-aware of optimistic thinking) of the impact findings trends in the positive direction. As a reminder, the main impact analysis, which averaged across subscales and included both student and teacher ratings, trended in the negative direction. Taken together, these findings raise the question of whether the teacher-rated and student-rated posttests are measuring the same or even similar constructs.

TABLE 19. IMPACTS OF HATC ON SELF AWARE OPTIMISTIC THINKING (SAOT) SUBSCALE

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|----------------|------------------------|
| Unadjusted effect size | BAU | 21.11 | 6.27 | 260 | 26 | 0.11 | .211 | 4% |
| | HATC | 21.84 | 6.69 | 241 | 25 | | | |
| Adjusted effect size | BAU | 21.11 | | | | -0.01 | .884 | -1% |
| | HATC | 21.02 | | | | | | |

Note. BAU is the "Business as Usual" (i.e., control) condition. The *p* value for the unadjusted effect size is obtained using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

TABLE 20. IMPACTS OF HATC ON SELF MANAGEMENT (SM) SUBSCALE

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|----------------|------------------------|
| Unadjusted effect size | BAU | 17.00 | 5.10 | 260 | 26 | 0.16 | .084 | 6% |
| | HATC | 17.79 | 5.17 | 241 | 25 | | | |
| Adjusted effect size | BAU | 17.00 | | | | 0.09 | .361 | 3% |
| | HATC | 17.44 | | | | | | |

Note. BAU is the "Business As Usual" (i.e., control) condition. The *p* value for the unadjusted effect size is obtained using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.
| TABLE 21 | . IMPACTS | OF HATC | ON SOCIAL | AWARENESS (| SO) SUBSCALE |
|----------|-----------|---------|-----------|-------------|--------------|
|----------|-----------|---------|-----------|-------------|--------------|

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadjusted effect size | BAU | 15.35 | 4.67 | 260 | 26 | 0.15 | .098 | 6% |
| Unaujusted effect size | HATC | 16.02 | 4.40 | 241 | 25 | 0.15 | | |
| Adjusted effect size | BAU | 15.35 | | | | 0.12 | 101 | F0/ |
| | HATC | 15.93 | | | | 0.13 .191 | | 5% |

Note. BAU is the "Business as Usual" (i.e., control) condition. The *p* value for the unadjusted effect size is obtained using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

TABLE 22. IMPACTS OF HATC ON RELATIONSHIP SKILLS (RS) SUBSCALE

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadiusted effect size | BAU | 12.75 | 3.77 | 260 | 26 | 0.17 | .064 | 7% |
| ondujusted effect size | HATC | 13.39 | 3.93 | 241 | 25 | 0.17 | | |
| Adjusted effect size | BAU | 12.75 | | | | 0.11 | 210 | F0/ |
| | HATC | 13.18 | | | | 0.11 .218 | | 5% |

Note. BAU is the "Business as Usual" (i.e., control) condition. The *p* value for the unadjusted effect size is obtained using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

TABLE 23. IMPACTS OF HATC ON GOAL DIRECTED BEHAVIOR (GB) SUBSCALE

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadjusted offect size | BAU | 14.77 | 4.21 | 260 | 26 | 0.05 | .565 | 2% |
| onaujusteu errect size | HATC | 15.00 | 4.44 | 241 | 25 | 0.05 | | |
| Adjusted effect size | BAU | 14.77 | | | | 0.01 | 007 | 00/ |
| | HATC | 14.82 | | | | 0.01 .906 | | 0% |

Note. BAU is the "Business as Usual" (i.e., control) condition. The *p* value for the unadjusted effect size is obtained using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

| TABLE 24. IMPACTS OF HATC ON PERSONAL RESPONSIBIL | ITY (PR) SUBSCALE |
|---|-------------------|
|---|-------------------|

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadiusted effect size | BAU | 15.03 | 4.49 | 260 | 26 | 0.09 | 274 | 3% |
| Unaujusteu ellett size | HATC | 15.40 | 4.53 | 241 | 25 | 0.06 | .370 | |
| Adjusted effect size | BAU | 15.03 | | | | 0.05 | (20 | 20/ |
| | HATC | 15.24 | | | | 0.05 .629 | | ۷% |

Note. BAU is the "Business as Usual" (i.e., control) condition. The *p* value for the unadjusted effect size is obtained using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

TABLE 25. IMPACTS OF HATC ON DECISION MAKING (DM) SUBSCALE

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadjusted effect size | BAU | 14.69 | 4.38 | 260 | 26 | 0.10 | .048 | 7% |
| Unadjusted effect size | HATC | 15.48 | 4.53 | 241 | 25 | 0.16 | | |
| Adjusted effect size | BAU | 14.69 | | | | 0.00 | 250 | 40/ |
| | HATC | 15.08 | | | | 0.09 .350 | | 4% |

Note. BAU is the "Business as Usual" (i.e., control) condition. The *p* value for the unadjusted effect size is obtained using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

Exploratory Investigation on Impacts of HATC on SE Competencies

As described above, the main full-sample impact finding of the average impact of HATC on student SE competencies, as measured through DESSA, indicates the *net impact for the available convenience sample of the study*. The main impact findings used the rule system for combining DESSA posttest scores, which involved using all available information by averaging rescaled versions of the student-self-rated (DESSA-SSR) and teacher-rated (DESSA-TR) posttest scores wherever possible. If a student had only one of the scores, then we used that score.¹⁰ Using this approach, we observed no impact of HATC on SE competencies (ES = -0.19, p = .167). When we explored the impact of HATC on SE competency subscale scores, which

¹⁰ Students had similar response rates for DESSA across conditions: 80.2% for HATC and 81.2% in control. For the sample of students with posttests, 79.5% in HATC and 79.3% in control had student-rated posttests, and 98.0% in HATC and 97.0% in control had teacher-rated posttests. This means the posttest scores were constructed similarly across conditions, whether as an average across student and teacher ratings, or by using one rating but not the other depending on availability.

were only available for the student-rated DESSA form, we noted trends with impacts tending in the positive direction — with the exception of one subscale score — but none reached statistical significance. When we compared the ratings of students who had both scores (i.e., teacher-rated and student-rated), we found a low correlation (*r* = .141) between the DESSA-SSR and DESSA-TR among the 283 students who had both scores.¹¹ This led us to consider that how students rate themselves may differ from how their teachers rate them. We were particularly interested in differences in teacher and student ratings based on student gender and student race, given recent research showing disparities in teacher-ratings of student SE competencies for different student groups. Specifically, Lee and colleagues (2024), found that among elementary school students where teachers used the DESSA-Mini, "boys (vs. girls), Black students (vs. White students), Hispanic students (vs. White students), and low-income students (vs. middle-to-high-income students) started with a lower level of [social-emotional competence (SEC)], with these gaps being sustained or slightly widened throughout 3 elementary school years." Based on these findings, Lee and colleagues (2024) call for "future research that can inform practice efforts to ensure equitable SEC assessments and produce more equitable SEL outcomes, thereby promoting equity in school mental health."

In the context of this study, we can contribute to this research and examine differences in assessments of SE competencies based on student vs. teacher rating, which are available at the high school level; Lee et al. (2024) was focused on elementary school where only teacher-ratings are available. Additionally, we can examine if the implementation of the HATC curriculum benefits student groups, based on their sociocultural identities, including across gender and racial identities. That is, by design, the experiment provides an opportunity to investigate the generalizability of the program's impact by assessing impacts for, and across, different student groups.

To better understand the impact results for DESSA, we explored the following questions.

- Is there a difference in SE competency ratings between student genders and for students in different racial groups for students in the control group? This question is important because it helps to expand on some of the findings in Lee et al. (2024). We limit this analysis to the control group to get a "baseline" for disparities in SE competency ratings between groups without any influence of HATC implementation. This then allows us to examine whether HATC changes any differences that are observed.
- 2. Is there an impact of HATC on student SE competency outcomes among males or females, or between students in difference racial groups: students who are White, Black, multiracial, Asian?¹²
- 3. Do the results in questions 1 and 2 depend on how the SE competencies were rated: (a) using all available posttest scores (i.e., using DESSA-TR only if DESSA-SSR is not available, using DESSA-SSR only if DESSA-TR is not available, or averaging across rescaled version of both scales if both are available), or (b) limiting to just student self-ratings (DESSA-SSR) among students with a DESSA-SSR pretest.

¹¹This sample was also limited to students who had DESSA-SSR pretests.

¹² Earlier in this work we examined "moderator effects" which ask the question of whether there are differences in impact across groups, whereas here we examine impacts per group. For example, here we examine whether there is an impact of HATC for males, and separately whether there is an impact for females, whereas in the corresponding moderator analysis we examined whether there was a difference between males and females in average program impact.

Question 3 resulted from finding a low correlation of .141 between the DESSA-SSR and DESSA-TR among the 283 students who had both scores (and also a self-rated DESSA pretest). Figure 11 shows a scatterplot of the teacher-rated and student-self-rated scores on the posttest for this group. The scatterplot demonstrates the low correlations between the student-rated and teacher-rated DESSA as data points that are loosely spread out with no clear line or pattern across both *HATC* (dark blue data points) and BAU (light blue data points). The lines of best fit are close to horizontal. That is, a stronger positive correlation would show the points more tightly clustered along a line that clearly angles upwards.

Bar graphs in Figure 12 display the impacts by group and condition for the larger sample (using all available posttests depending on availability). In all, 626 students¹³ were in this analysis. Figure 13 shows corresponding results when using the DESSA-SSR only as the outcome for students who also had a non-missing pretest (N = 291 students).



FIGURE 11. SCATTERPLOT OF DESSA-TR VERSUS DESSA-SSR OUTCOME BY CONDITION

¹³We removed the six American Indian students from analysis because the small sample appeared to be exerting a strong influence in some of the models used to make comparisons across groups.



FIGURE 12. AVERAGE DESSA STUDENT- AND TEACHER-RATED OUTCOME SCORES, BY CONDITION AND STUDENT GROUP

* Impact with p < .20 (provides at least a small degree of confidence that the difference does not reflect just random sampling error)

Note. N = 626 students. The endpoints of each of the braces correspond to the light blue (control) bars above them, for which we have at least a small degree of confidence (p < .20) that the height difference (i.e., a difference in average control performance) does not just reflect random sampling error. We examined comparisons between males and females, and between White students and their Asian, Black, and multiracial peers.



FIGURE 13. AVERAGE DESSA STUDENT SELF-RATED OUTCOME SCORES, BY CONDITION AND STUDENT GROUP

* Impact with p < .20 (provides at least a small degree of confidence that the difference does not reflect just random sampling error)

Note. N = 291. The endpoints of each of the braces correspond to the light blue (control) bars above them for which we have at least a small degree of confidence (p < .20) that the height difference (i.e., a difference in average control performance) does not just reflect random sampling error. We examined comparisons between male and female, and between White students and every other racial group.

There are two main findings.

1. We observed gender differences in the ratings of male and female students in the control group when using all available ratings and when only using student ratings. In both instances, females receive higher SE competency ratings than males. When we look at all ratings (N = 626), on average, males receive lower ratings than females by -.213 average z-score deviates (p = .010). When we look at only student ratings, males self-rate lower than females by -.235 average z-score deviates (p = .025). We also observe differences in control performance between specific racial identity groups and White students (who served as the reference group). Differences between White and Asian control students seem similar, whether self-rated or teacher-rated. (See Figure 12 and Figure 13.)

2. Descriptively, we observed that when using only student-ratings, students in the HATC group self-rate themselves higher on SE competencies compared to when all available ratings (student, teacher, or average, depending on availability) are used.

Taken together, these findings suggest that students and teacher ratings may not be capturing the same constructs. It may be that students' internal views of their own SE competencies are distinctly different from teachers' ratings of students external, observable SE competencies. We see this descriptively in differences in control performance (differences in levels of gray bars) and differences in impact (differences between heights of blue and gray bars), when comparing the larger sample in Figure 12 (representing teacher and student self-rated scores) and results for corresponding groups in Figure 13 (limited to student self-rated scores). These preliminary findings raise questions about what assessment tools should answer questions of impact.

Future studies should draw similar comparisons, but for a single sample where each student has both ratings. This will rule out possible differences in outcomes that are attributable to differences in samples. Any differences observed with a constant sample of students must arise from either a difference between how students and teachers judge individual students in terms of their levels of SEL, or from students and teachers conducting ratings using different versions of DESSA. Future studies should also interview teachers and students to better understand how they arrive at their ratings. A comparison between teacher ratings on the longer form version of the DESSA and the student self-ratings would help to clarify if the differences observed here are due to limitations of using a short form.

When interpreting these findings several caveats should be kept in mind.

- *Sample size:* Results that go from being statistically significant to not, may partially reflect a change in the sample size and a difference in the sensitivity of a statistical test to detect impact at a statistically significant level. The results in Figure 13, especially, are expected to reflect random sampling error, given the relatively smaller sample (N = 291).
- *Sample and test compositions:* Any changes between Figure 12 and Figure 13 may reflect a change of sample, rather than a difference in the SEL measure used. This can be addressed by using samples with both the DESSA-SSR and DESSA-TR ratings. This would be a useful next step in our evaluation.
- *Baseline equivalence:* Any treatment-control comparisons for subgroups should be subject to a baseline equivalence test to see if the equivalencies observed for the larger samples persists for the smaller samples.

IMPACT ON STUDENT ABSENCES FROM SCHOOL

Outcome and Analytic Sample Size

The outcome measure is the proportion of days absent over the course of the 2023–24 school year during the period of HATC implementation. The periods are different for RIHS and TMLC, given that the periods of implementation spanned different lengths of time at the two schools. Expressing days absent as a proportion of total days during which implementation took place at each school gives us a common metric across schools for comparing outcomes across conditions.

At RIHS, implementation took place over the course of 174 days. We will use this to calculate the proportion of days absent during RIHS implementation. At TMLC, implementation took place over the course of 92 days. We will use this to calculate the proportion of days absent during TMLC implementation.

The district office compiled the data for students in advisory classes of study teachers, and we requested and obtained these data for analysis. The count of absences was available separately for each student on the randomized rosters. As a baseline covariate in the analysis, we used the number of absences, per student, for the year prior: the 2022–23 school year.

Overall, we obtained outcomes for students from 26 teachers randomized to *HATC* and for students from 27 teachers randomized to BAU. This represents all teachers randomized at RIHS and TMLC. We obtained outcomes for 377 of 387 students on baseline rosters of teachers randomized to *HATC*, and 391 of 405 students on baseline rosters of teachers randomized to BAU. The (i) full attrition calculation, (ii) baseline equivalence for the study sample based on rosters received, and (iii) baseline equivalence for the sample with real (unimputed) baseline "pretest" values for individuals who also have an outcome are provided in Supplement Section 4 to support WWC review. Student demographics for the analytic sample for the analysis of student absences are in Table 26.

TABLE 26. STUDENT DEMOGRAPHICS OF ANALYTIC SAMPLE FOR ABSENCES

| Values | НАТС | BAU | Total |
|---|------|-----|-------|
| Total students | 377 | 391 | 768 |
| Teachers assigned to condition | 26 | 27 | 53 |
| Student gender (n = 768) | | | |
| Male | 200 | 202 | 402 |
| Female | 177 | 189 | 366 |
| Student ethnicity (n =757) | | | |
| Hispanic | 53 | 70 | 123 |
| Non-Hispanic | 316 | 318 | 634 |
| Student race (n = 767) | | | |
| Asian | 35 | 23 | 58 |
| Black | 122 | 113 | 235 |
| Multiracial | 32 | 45 | 77 |
| White | 187 | 210 | 397 |
| Student socioeconomic status (n = 757) | | | |
| Receiving fee waiver ^a | 193 | 203 | 396 |
| Not receiving fee waiver | 176 | 185 | 361 |
| Student limited English proficiency (n = 757) | | | |
| Students with limited English proficiency | 58 | 31 | 89 |
| Student without limited English proficiency | 311 | 357 | 668 |

^a Illinois law requires schools to waive school fees for students who are experiencing homelessness or are low-income.

Note. BAU is the "Business as Usual" (i.e., control) condition

Impact Results for Student Absences

Results of the main analysis of the impact of HATC on student absences are in Table 27. The row labeled "Unadjusted effect size" reports the percentage of days students were absent in each condition, which is 16.73% among BAU and 19.26% for the HATC group. It also reports the standardized effect size (mean difference between conditions in outcomes, divided by the pooled standard deviation). The difference is not statistically significant (p = .499).

The row labeled "Adjusted effect size" reports the outcome for the BAU mean (16.73% absent) and the *HATC* mean (the control mean plus the model-based estimate of the treatment effect) (16.73 +1.61 = 18.34% absent). The effect size in this row is the regression-adjusted point estimate for the impact, divided by the pooled standard deviation of the outcome. This adjusted value is the main result. The impact is slightly above zero, but it does not reach conventional levels of statistical significance (i.e., p < .05). (The full set of results for the main impact model are in Supplement Section 5.) We conclude that HATC had no impact on student absence from school.

TABLE 27. IMPACT OF HATC ON STUDENT ABSENCE FROM SCHOOL

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|----------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|----------------|------------------------|
| Unadjusted effect | BAU | 16.73 | 18.08 | 391 | 27 | 0.12 | 400 | 5% |
| size | HATC | 19.26 | 21.28 | 377 | 26 | 0.13 | .499 | |
| Adjusted affect size | BAU | 16.73 | | | | 0.09 | 252 | 20/ |
| Aujusteu effect size | HATC | 18.34 | | | | 0.08 .253 | | 3% |

Note. BAU is the "Business as Usual" (i.e., control) condition. We obtain the *p* value for the unadjusted effect size using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies, relative to the median of the control distribution.

The adjusted effect size, based on a model that weighted the impacts across schools by the inverse of the estimated variance in outcomes, yielded an effect size of .08.

To evaluate the stability (robustness) of the results, we analyzed the impact of HATC on student absences using several different approaches. We summarize the results Supplement Section 6. The treatment effect indicates the estimated difference in the percentage of days absent. The first five models progressively include more covariates. Models 6 and 7 include only students who have a real (unimputed) baseline and outcome values for number of absences from school. The seven results are all similar, showing small positive differences in the percentage of absences from school in *HATC* compared to BAU, but none of the estimates reach statistical significance.

Results of Moderating Variables

In addition to evaluating the average impact of HATC on number of school absences, this work examined whether impact varied across important student groups. We summarize the results in the following table. The moderating characteristic is in the first column. In the column 'Interpretation of the estimated effect', a ^ indicates the impact estimate for the reference group. The estimate of *additional impact* for the group we are comparing to the reference group is in column 'Estimated effect (SE)'. Only the score on the teacher's SEL belief scale is associated with a statistically significant change of impact on attendance (p = .012). The result is counterintuitive suggesting an increase in absences among students of teachers who score higher on the SEL belief scale. We observe no statistically significant differences in impact between groups (by

gender, race and ethnicity, socioeconomic status, limited English proficiency, experience level of the teacher based on number of years teaching, and teachers' incoming beliefs about SEL). It is important to underscore that when looking at multiple effects, one or more will reach statistical significance by chance alone (Schochet, 2008). Therefore, the single significant effect observed here should be replicated before arriving at any firm conclusions.

TABLE 28. DIFFERENCES IN IMPACT OF HATC ON ABSENCES ACROSS MODERATING VARIABLES

| Moderator | Interpretation of the estimated effect | Estimated effect (SE) | p value |
|--|---|-----------------------|---------|
| Student gender | Effect for females ^ | 1.85(1.64) | .267 |
| Statent gender | Added effect for males | 0.13(1.79) | .943 |
| Student athnicity | Effect for Non-Hispanic students ^ | 2.41(1.39) | .091 |
| Student etimicity | Added effect for Hispanic students | -2.72(2.45) | .268 |
| | Effect for White students ^ | 2.72(1.61) | .098 |
| Student race | Added effect for Black students | -1.29(2.10) | .538 |
| | Added effect for Asian students | -2.08(3.80) | .585 |
| | Added effect for multiracial students | -2.50(3.10) | .421 |
| Student socioeconomic status | Effect for students not receiving fee waiver ^ | 2.36(1.63) | .156 |
| | Added effect for students receiving fee waiver | 75(1.81) | .679 |
| limited English proficiency (LEP) status | Effect for students without LEP $^{\wedge}$ | 2.07(1.38) | .140 |
| | Added effect for students with LEP | -1.44(4.81) | .765 |
| Years of teaching experience | Effect for teacher with average years of teaching experience $^{\wedge}$ | 2.02(1.36) | .145 |
| Years of teaching experience | Added effect for each additional year teaching | 09(0.16) | .556 |
| Teacher SEL belief scale | Effect for teacher with average score on SEL belief scale at baseline $^{\wedge}$ | 2.08(1.29) | .113 |
| | Added effect for each unit-increase in teacher SEL belief scale at baseline | 7.58(2.87) | .012 |

^ Indicates the reference group for the analysis. The estimate of additional effect for the group to which the reference group is being compared is in the Estimated effect (SE) column.

Note. Estimates represent the change in impact on absences at posttest (in z-score deviate units, as described earlier in this chapter) for each unit increase in the moderator variable.

IMPACT ON DISCIPLINARY REFERRALS

Outcome and Analytic Sample Size

A student may receive a disciplinary referral to the main office for a range of possible offenses including engaging in academic dishonesty (e.g., cheating), disobeying directives from staff members, engaging in hazing or bullying, vandalism, etc. (see Appendix D for full list of referable offenses). We assessed impact of HATC on the number of disciplinary referrals.

The outcome consists of the number of disciplinary referrals per 100 days of enrollment over the course of the 2023–24 school year. As a baseline covariate in the analysis, we used the number of disciplinary referrals, per student, for the year prior: the 2022–23 school year.

As was noted regarding analysis of impact on student absences, the number of eligible days for counting events (attendance or disciplinary referrals) varies between RIHS and TMLC, because the periods of implementation were different at each school. For disciplinary referrals, we standardized the number of referrals by dividing the number of events per student by the number of days of implementation at their school and multiplying this number by 100. This yielded the number of expected disciplinary referrals across students over a projected 100-day period.

In all, we obtained outcomes data for disciplinary referrals for 768 of 792 students on the fall rosters of all 53 implementing teachers. For these students, baseline disciplinary data were available for 377 students among 26 *HATC* teachers, and for 391 students among 27 BAU study teachers. Rates of attrition among teachers and students are exactly the same as with the data used for analysis of impacts on student absences reported above (Table 26). Because the number of referrals will depend on days of enrollment, as noted above, we multiplied the daily referral rate by 100 to allow the result to be interpreted as "per 100 days of enrollment" (recognizing that at TMLC implementation took place over a 92-day period). No attrition at the teacher level and low attrition at the student level allows the use of dummy variable imputation methods (WWC, 2022; Puma et al., 2009) for missing values of covariates, including the pretest for impact. The (i) full attrition calculation, (ii) baseline equivalence for the study sample based on rosters received, and (iii) baseline equivalence for the sample with real (unimputed) baseline "pretest" values for individuals who also have an outcome are provided in Supplement Section 7 to support WWC review.

Main Impact Result for Disciplinary Referrals

Table 29 summarizes the result of the analysis of average impact on students' disciplinary referrals. The row labeled "Unadjusted effect size" reports the average number of disciplinary referrals across students in each condition, which is .41 per one hundred days of enrollment among BAU and .42 per 100 days of enrollment for the HATC group. It also reports the standardized effect size (mean difference between conditions in outcomes, divided by the pooled standard deviation). The difference is not statistically significant (p = .925).

The row labeled "Adjusted effect size" reports the outcome for the BAU mean (.41) and the *HATC* mean (the control mean plus the model-based estimate of the treatment effect) (.41 +.07 =.48). The effect size in this row is the regression-adjusted point estimate for the impact, divided by the pooled standard deviation of the outcome. The full model results are in Supplement Section 8.

The result was robust. Analysis included only students with non-missing values of baseline and post-intervention values for disciplinary referrals, yielding an impact of .15 scale score units (p = .117). The results of multiple models with covariates progressively added did not change the result (see Supplement Section 9).

Due to a preponderance of zero responses (no disciplinary referrals), we also examined the impacts by calculating the Cox Index for the model, without adjustment for effects of covariates. The Cox Index expresses the impact for a binary outcome as a standardized effect size (i.e., as if we estimated the difference in means of two continuous outcome variables and divided them by the standard deviation of those outcomes). In the HATC condition, 84 of 377 students (22.3%) received at least one disciplinary referral. In the control condition, 92 of 391 (23.5%) received at least one disciplinary referral. The probabilities are almost equal across conditions. The resulting odds ratio is .989, and the natural log of this odds ratio is (ln (odds ratio) = -.011). The Cox index is -.011/1.65 = -.01. This corroborates the finding in the main analysis that there is virtually no impact for this outcome.

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|-------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadjusted offect size | BAU | 0.41 | 1.36 | 391 | 27 | 0.01 | 025 | 0% |
| onaujusteu errect size | HATC | 0.42 | 1.25 | 377 | 26 | 0.01 | .925 | |
| Adjusted effect size | BAU | 0.41 | | | | 0.07 | 402 | 20/ |
| | HATC | 0.48 | | | | 0.06 .403 | | 2% |

TABLE 29. DISCIPLINARY REFERRAL EFFECT SIZES FOR STUDENT OUTCOME

Note. BAU is the "Business as Usual" (i.e., control) condition. We obtained the *p* value for the unadjusted effect size using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

Results of Moderating Variables

The table below displays estimates of differential impacts of HATC on disciplinary referrals. This work examined whether impact varied across important student groups. The following table summarizes the results. The moderating characteristic is in the first column. The impact estimate for the reference group has a ^ in the column 'Interpretation of the estimated effect'. The estimate of *additional impact* for the group we are comparing to the reference group is in column 'Estimated effect (SE)'. We observe no statistically significant differences in impact between groups (by gender, race and ethnicity, socioeconomic status, limited English proficiency, experience level of the teacher based on number of years teaching, and a teacher's incoming beliefs about SEL).

| Moderator | Interpretation of the estimated effect | Estimated effect (SE) | <i>p</i> value |
|--|---|-----------------------|----------------|
| Student gender | Effect for females ^ | .09(.12) | .478 |
| Statent gender | Added effect for males | 00(.16) | .986 |
| Student ethnicity | Effect for Non-Hispanic students ^ | .06(.09) | .505 |
| Student etimicity | Added effect for Hispanic students | .16(.23) | .492 |
| | Effect for White students ^ | .01(.12) | .908 |
| Student race | Added effect for Black students | .18(.19) | .338 |
| | Added effect for Asian students | .14(.34) | .684 |
| | Added effect for multiracial students | .10(.29) | .719 |
| Student socioeconomic status | Effect for students not receiving fee waiver $^{\wedge}$ | 20(.12) | .115 |
| Student Socioeconomic Status | Added effect for students receiving fee waiver | 21(.17) | .209 |
| Limited English proficiency (LEP) status | Effect for students without LEP ^ | .08(.09) | .371 |
| | Added effect for students with LEP | .13(.33) | .690 |
| Years of teaching experience | Effect for teacher with average years of teaching experience $^{\wedge}$ | .08(.09) | .337 |
| | Added effect for each additional year teaching | .01(.01) | .542 |
| Teacher SEL belief scale | Effect for teacher with average score on SEL belief scale at baseline $^{\wedge}$ | .08(.09) | .389 |
| | Added effect for each unit-increase in teacher SEL belief scale at baseline | 20(.20) | .333 |

^ Indicates the reference group for the analysis. The estimate of additional effect for the group to which the reference group is being compared is given in column Estimated effect (SE).

Note. Estimates represent the change in impact on disciplinary referrals at posttest (in z-score deviate units, as described earlier in this chapter) for each unit increase in the moderator variable.

IMPACT ON READING ACHIEVEMENT

Outcome and Analytic Sample Size

We assessed impact of HATC on reading achievement. The outcome consists of the NWEA MAP test of reading evaluated in the spring of the 2023–24 school year. For the benchmark analysis, we used student outcomes on the same assessment but from the year prior, as a covariate in analysis. Other covariates included gender, ethnicity and school.

In all, we obtained outcomes data for 227 students on the fall rosters of 21 *HATC* teachers, and for 265 students on the fall rosters of 23 BAU teachers. The sample size is smaller than in the analysis of DESSA scores because MAP is administered in grades 9–11 only. Student demographics for the analytic sample for impact on reading are in Table 31 below. The full attrition calculation is in Supplement Section 10.

Main Impact Result for Result Reading Achievement

The table below summarizes the result of the analysis of average impact on students' reading achievement using NWEA MAP scores. The row labeled "Unadjusted effect size" reports the number of students and teachers in each condition that contribute outcomes to the analysis. It also reports the standardized effect size (mean difference between conditions in outcomes, divided by the pooled standard deviation). The difference is not statistically significant (p = .997).

The row labeled "Adjusted effect size" reports the outcome for the BAU mean (217.81) and the *HATC* mean (the control mean plus the model-based estimate of the treatment effect) (217.81 +1.13 =218.94). The effect size in this row is the regression-adjusted point estimate for the impact, divided by the pooled standard deviation of the outcome. The impact is not statistically significant (p = .214). The impact model for the benchmark analysis is provided in Supplement Section 11.

A test of the robustness of results used the same analytic model but limited the sample to students with non-missing values of baseline and post-intervention values for reading achievement. The estimate of the program effect was 0.62 scale score units (p = .498).

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|--------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadjusted effect size | BAU | 217.81 | 15.47 | 265 | 23 | -0.00 | .997 | -0% |
| | HATC | 217.80 | 17.76 | 227 | 21 | | | |
| Adjusted effect size | BAU | 217.81 | | | | 0.07 | .214 | 3% |
| | HATC | 218.94 | | | | | | |

TABLE 31. IMPACT OF HATC ON STUDENT READING OUTCOMES

Note. BAU is the "Business as Usual" (i.e., control) condition. We obtained the *p* value for the unadjusted effect size using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

IMPACT ON MATHEMATICS ACHIEVEMENT

Outcome and Analytic Sample Size

We assessed impact of HATC on mathematics achievement. The outcome consists of the NWEA MAP test of mathematics evaluated in the spring of the 2023–24 school year. For the benchmark analysis, we used student outcomes on the same assessment, but from the year prior as a covariate in analysis. Other covariates included gender, ethnicity and school.

In all, we obtained outcomes data for 193 students on the fall rosters of 22 *HATC* teachers, and for 253 students on the fall rosters of 23 BAU teachers. The sample size is smaller than in the analysis of DESSA scores because MAP is administered in grades 9–11 only. The full attrition calculation is in Supplement Section 12.

Main Impact Result for Mathematics Achievement

Table 32 summarizes the result of the analysis of average impact on students' Mathematics achievement using NWEA MAP scores. The row labeled "Unadjusted effect size" reports the number of students and teachers in each condition that contribute outcomes to the analysis. It also reports the standardized effect size (mean difference between conditions in outcomes, divided by the pooled standard deviation). The difference is not statistically significant (p = .953).

The row labeled "Adjusted effect size" reports the outcome for the BAU mean (231.69) and the *HATC* mean (the control mean plus the model-based estimate of the treatment effect) (231.69 – 1.09 = 230.60). The effect size in this row is the regression-adjusted point estimate for the impact, divided by the pooled standard deviation of the outcome. The result is not statistically significant (*p* = .357). The impact model for the benchmark analysis is provided in Supplement Section 13.

A test of the robustness of results used the same analytic model but limited the sample to students with non-missing values of baseline and post-intervention values for reading achievement. The estimate of the program effect was 1.20 scale score units (p = .237).

| | Condition | Means | Standard deviations | No. of students | No. of teachers | Effect size | <i>p</i> value | Percentile standing |
|------------------------|-----------|--------|------------------------|--------------------|--------------------|----------------|-------------------|------------------------|
| Unadjusted effect size | BAU | 231.69 | 18.04 | 253 | 23 | 0.01 | .953 | 1% |
| | HATC | 231.94 | 21.03 | 193 | 22 | | | |
| Adjusted effect size | BAU | 231.69 | | | | -0.06 | .357 | -2% |
| | HATC | 230.60 | | | | | | |

TABLE 32. IMPACT OF HATC ON STUDENT MATHEMATICS OUTCOMES

Note. BAU is the "Business as Usual" (i.e., control) condition. We obtained the *p* value for the unadjusted effect size using methods for unadjusted analysis for cluster-level assignment studies (WWC, 2022). The *p* value for the adjusted effect size corresponds to the impact estimate from the benchmark impact model with adjustment for clustering. The Percentile Standing indicates where the median score for the treatment group lies relative to the median of the control distribution.

Chapter 6. Discussion

OVERVIEW

This report presents the findings of a one-year randomized control trial investigating the effectiveness of HATC: a SEL curriculum for high school students. The project is funded through a 2022 early-phase EIR grant awarded to RIMSD. RIMSD partnered with CWK to develop HATC, which blends CASEL-aligned SEL lessons and project-based learning (PBL) modules that culminates in a capstone project in which students form "production teams" and create short, student-voice documentaries to tell *their* stories and make meaning of what they have learned.

The research study took place in 9th–12th grade advisory classes at RIHS and second block classes at TMLC during the 2023–2024 school year. To understand the effectiveness of HATC, we randomly assigned participating teachers to use the HATC curriculum or to continue with their BAU instruction. Guided by the project logic model, the study tracked the implementation of key components, initial teacher training, and periodic teacher coaching, to assess fidelity of implementation. In addition, the study examined whether HATC positively impacts the classroom environment, teacher wellbeing, teachers' SE competencies, and teacher job satisfaction. The study also examined if HATC positively impacts students' SE competencies, absences, disciplinary referrals, and achievement in reading and mathematics. Further, we investigated whether impact of HATC varied for students with different characteristics. Our main student outcome measures for SE competencies were the DESSA-HSE student- and teacher-rated assessments. RIMSD provided student demographics, days absent, disciplinary referrals, and achievement data. We also gathered implementation data via teacher surveys and interviews to understand implementation successes and challenges and inform outcome results. Throughout the study, CWK and RIMSD administrators maintained a responsive and collaborative partnership with the research team.

IMPLEMENTATION RESULTS

In general, the conditions for implementation were favorable. Implementation of HATC began at the start of the school year in RIHS, and all teachers confirmed that they had the required materials at the time of the first quarterly survey in September 2023. At TMLC, implementation began in January 2024, and all teachers confirmed that they received their materials. Compared to BAU teachers, *HATC* teachers reported spending more time preparing for their advisory classes, typically about one to three hours per week. Regarding feedback and reflection sessions, most RIHS teachers found their quarterly sessions to be less helpful as the year progressed. However, TMLC teachers found their monthly sessions to be more helpful as the year progressed. Notably, both RIHS and TMLC teachers found the virtual sessions with the production team to be helpful. In particular, the support provided around video editing was very helpful to teachers and students.

The extent of implementation and program satisfaction varied between schools and among teachers. The mixed experience of RIHS teachers is well summed up by looking at their reported interest in continuing to use the curriculum. On their first survey in September 2023, most teachers were at least slightly interested in using the curriculum in the following school year. By the final survey in May 2024, half of RIHS teachers were slightly to very interested in using the HATC curriculum again, and half of teachers were not at all interested in using the HATC curriculum again. Based on survey responses and teacher interviews, student engagement proved to be a significant implementation challenge for RIHS teachers and likely a key driver of mixed interest in continuing use of the curriculum. Teachers reported that it was challenging to keep students engaged in a structured curriculum during advisory period when their peers (those in

advisory classes not implementing the program) were able to socialize, receive academic support, or complete other work. For some students, the opportunity to produce a documentary film drew them back into the curriculum, but many teachers were unable to re-engage students after losing their interest in the content heavy first semester. Notably, although student engagement posed a distinct challenge, RIHS teachers persevered through the first year of implementation. Most teachers completed the majority of SEL units and PBL breaks. Over half of teachers reported uploading a final film to the repository. Overall, for the teachers able to maintain engagement, HATC provided teachers and students the chance to engage in important conversations and gave students an exciting opportunity to tell stories important to them in a documentary format.

In contrast, most TMLC teachers reported high student engagement in the curriculum. However, student absenteeism posed the greatest impediment to implementation at TMLC. Two of the five participating teachers were unable to complete the curriculum due to a lack of consistent student attendance in their classes. For the three teachers who did complete the curriculum, the peer-to-peer film production process of HATC empowered students to work together to tell powerful stories about themselves and their community. The environment at TMLC, notably the smaller classes combined with closer teacher-student relationships, may have also been important factor for their successful implementation. Overall, the teachers at TMLC seemed uniquely positioned to pivot as needed and make the curriculum work for their students.

Overall, fidelity of implementation was met during the first study year. Both schools met the fidelity threshold for attendance at the initial teacher training, provision of SEL resources, and provision of PBL resources, but only TMLC met the threshold for attendance at periodic coaching sessions. As described above, RIHS teachers found sessions less helpful as implementation progressed, which likely impacted attendance. This indicator will be important to monitor moving forward, as SEL instructional coaches begin to take on a larger role around coaching. In-school instructional coaches will have the opportunity to frequently connect with teachers in their classrooms, which may prove critical in improving teachers' views of the helpfulness of feedback and reflection sessions and, therefore, their attendance at such sessions throughout implementation.

TEACHER IMPACT RESULTS

We did not detect positive impacts of HATC on teacher outcomes. We hypothesized that teacher participation in an SE curriculum might positively impact teachers' own ratings of the SE competencies. However, results suggest that *HATC* and BAU teachers rated themselves similarly with an average score of about four out of five across competencies. We observed differences between *HATC* and BAU teachers on their ratings of teacher wellbeing (as measured by the Maslach Burnout Inventory for Educators) with BAU teachers reporting more slightly favorable, but not statistically different, responses. Additionally, we found no impact of HATC on teacher job satisfaction.

In exploring the impact on the classroom environment, we observe a negative impact of HATC on participating teacher's ratings of student *involvement* (the extent to which students are attentive and interested in class activities, participate in discussions, and do additional work on their own) and student *affiliation* (the friendship students feel for each other, as expressed by getting to know each other, helping each other with work, and enjoying working together). As described above, teachers reported challenges related to implementation of HATC, including student engagement and chronic absenteeism that likely influenced their responses to survey questions about their classroom environment.

STUDENT IMPACT RESULTS

We did not detect an impact of HATC on absences or disciplinary referrals, as measured by student data requested from RIMSD. Additionally, we did not detect an impact of HATC on students' academic achievement in reading or mathematics, as measured by the NWEA MAP assessment. Further, we did not observe any moderating effect of student demographics or teacher baseline variables on absences, disciplinary referrals, or achievement on these outcomes.

The one exception was a differential effect of HATC on student absences, depending on teacher SEL beliefs at the start of the study. This result reached conventional levels of statistical significance (p < .05). However, with multiple results (and without making analytical adjustments for drawing multiple comparisons), it is highly probable that one or more effects will reach statistical significance by chance alone. A replication effort would have to confirm the effect before drawing any conclusions.

Overall, we did not observe an impact of HATC tudents' overall SE composite or individual competencies, as measured by the DESSA (student- and teacher-rated). However, we did find a promising result which suggests a positive differential impact of HATC on male students' SE competencies when measured by the DESSA-SSR or the student-self rating assessment. When the sample was limited to male students who had self-rated scores (DESSA-SSR) at both pretest and posttest, the deficit in performance relative to BAU males went from .185 z-score deviates (approximately standardized effect size units) to .042 z-score deviates. The impact on DESSA for males also went from being marginally statistically significant and negative to not statistically significant. Furthermore, as a point for continual exploration, it is noteworthy that the results based on student and teacher ratings showed that males in the HATC condition scored .317 z-score deviates lower than females. When using student self-rating, the difference between these groups is reduced to .134. The interaction between how SEL is rated (by self or others), gender, and treatment condition (HATC or BAU), is important to investigate further given that males have been found to score below their female peers on measures of SE competencies like empathy, self-management, self-awareness, emotion recognition awareness, and relationship quality (e.g., Allemand et al., 2014; Feraco & Meneghetti, 2023; Rimm-Kaufman et al., 2024; Ross et al., 2019; Van der Graaff et al., 2014; Wright et al., 2018). Additionally, we observed a low correlation between teacher and student ratings. This finding, and the differences described about impacts on DESSA outcomes for males, and the male-female DESSA performance gradient, depending on which rating was used - an average of student and teacher ratings, or just student self-ratings - raises important questions about the potential differences between student-rated and teacher-rated assessments of SE competencies. Our preliminary results suggest that teachers and students may be rating different constructs, or different dimensions of the same construct. Notably, we observe trend of more-positive impacts of HATC for specific groups when limited to student self-rated SE competencies. This will be important to consider moving forward as RIMSD determines what assessment tool best fits their needs and how data from each tool can be used to inform decision making about programming and also individual student needs.

CONSIDERATIONS

There are additional considerations when interpreting findings from this impact study. First, there was a very compressed program development timeline. The EIR grant officially launched in January 2023, and development of the curriculum materials occurred January–June 2023. Teacher training and implementation began in July 2023, a mere seven months after the project launch. Additionally, given that the grant was awarded to RIMSD—and they only had two high schools, both slated to participate in the RCT—there was no opportunity to pilot the implementation, and refine/improve prior to the experiment without risking contamination from exposure to the program during the pilot period. In other words, the year

of the RCT was the pilot: the first time the program was implemented. While both CWK and RIMSD administrators were very responsive to feedback from teachers and students (e.g., reducing implementation to four days per week in RIHS, and bringing in extra technical support during filming), these implementation challenges and adjustments took place during the impact study.

It is also important to consider the challenges of implementation in the context of BAU, especially as it relates to student engagement in RIHS. Administrators in RIHS were excited to implement a structured program during advisory period, and make productive use of that time with a curriculum that could improve student SE competencies. However, it was difficult for teachers to engage students in this program while their peers (those not in implementing classes) were able to use their advisory period to socialize, receive academic support, or complete other work. The nature of the experimental design (having some classes implement and others not) lent to difficult conditions for implementation, which may have impacted the overall effect of the curriculum. This study highlights the very practical problem of using BAU as a contrast, when BAU practice (e.g., typical advisory) is of value to teachers and students and the proposed treatment is more demanding, structured, and as yet, untested at the school. As RIHS has shifted to HATC three days per week and ninth-grade-only implementation during the 2024–2025 school year, it will be important to observe if problems of student engagement are mitigated or if teachers and students still feel a need for a typical advisory period five days per week. If issues remain around the use of advisory time, teachers proposed several alternatives. Several teachers suggested that HATC could be an elective that students chose to take or perhaps students with SE needs are recommended to take. Overall, going forward RIMSD will need to identify the optimal time and space for HATC implementation to allow the program to maximally benefit students.

LOOKING FORWARD

In response to the implementation challenges and successes noted above, RIMSD administrators and CWK worked together to adapt the HATC curriculum for the 2024–2025 school year based on the feedback provided by teachers and interim data presented from teacher surveys and interviews. At RIHS, HATC will be implemented in all ninth grade advisory classes for three days per week. As all ninth graders will be receiving the curriculum, this should eliminate the unfairness that some past students felt because they lost their advisory time when their peers did not. Implementation went schoolwide at TMLC. It will be important to continue to examine if the smaller class sizes and teacher-student relationships at TMLC continue to facilitate the successful implementation of the curriculum. The optimal classroom environment for implementation will be important to consider as project scaling continues. To further support teachers, CWK provided all participating teachers with a pacing guide aligned with a revised curriculum scope and sequence, and importantly, shifted the order of activities so students received access to the film kits and filming activities earlier in the curriculum.

As the lead of this grant, RIMSD has cultivated a strong partnership with project stakeholders. The project had a highly skilled and passionate project director during the RCT, and collaborative team meetings have been instrumental in fostering effective communication and innovation. CWK and RIMSD administrators are also responsive to teacher needs, and their ability to make responsive adjustments as needs arise has been particularly successful. Beginning in the 2024–2025 school year, RIMSD also hired an instructional coach to assist with continued fidelity of implementation, coaching support, and sustainability. In future years, RIMSD intends to hire additional instructional coaches, who have demonstrated strong student and colleague relationships, and experience teaching SE learning lessons at the classroom level. RIMSD hopes to take full ownership of this curriculum and embed it within the culture of their two high schools. To

achieve this goal, RIMSD intends to codify the newly developed HATC components—including manuals, videos, policy briefs, and hands-on guidance regarding leadership strategies, training, curriculum implementation—so that the curriculum continues to be implemented with clear guidance and fidelity. There will also be an implementation guidebook, developed in accordance with the HATC model and the validated program parameters from this project. These resources, as well as insights gleaned during the implementation process, will be available through an online resource center that includes blogs, how-to guides, articles, and other resources. Notably, in years four and five of the grant, RIMSD plans to invite the other districts to visit and discuss the opportunities of scaling out HATC more broadly. Overall, RIMSD intends to leverage this five-year grant into a long-term strategy for bolstering the SEL skills of high school students in Rock Island and beyond.

The Empirical Education team will continue to work with CWK and RIMSD to formatively evaluate the implementation and impact of HATC, and refine and improve the HATC curriculum, as project scaling continues. It is important that through this partnership, we continue to monitor student engagement, the impact of absenteeism, the appropriateness of data collection tools (e.g., when should student-ratings vs. teacher-ratings be used), the unique implementation strengths of teachers and students in TMLC and RIHS, and the potential to provide equitable access to SEL curriculum. Our hope is to contribute to the national conversation about SEL supports and the local understanding of what works for Rock Island.

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