

Breathe For Change & K-12 Student Attendance and Chronic Absenteeism (2023-24)

Study Type: ESSA Level II

Prepared for: Breathe For Change

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Executive Summary

Breathe For Change partnered with LearnPlatform by Instructure (LearnPlatform) to examine whether educator participation in their Mindfulness, Social-Emotional Learning (SEL), & Yoga Teacher Training impacted K-12th grade student attendance and chronic absenteeism. LearnPlatform designed the study to satisfy Level II evidence standards in the Every Student Succeeds Act (ESSA, 2015).

Study Sample and Measures

The study included 172 K-12 educators (22 treatment, 150 comparison) and 955 students (597 treatment, 358 comparison) in a mid-size public school district in Massachusetts. The study used teacher survey responses to describe educator usage of Breathe For Change program strategies. Student attendance and chronic absenteeism (i.e., students who missed 10%+ of school days) served as the outcomes of interest.

Analytic Approach

Researchers used descriptive statistics to summarize participant characteristics and usage of program strategies. To examine the impact of having at least one Breathe For Change-trained educator on student outcomes, researchers conducted multiple regression models. In addition to propensity score weights, outcome analyses included student covariates (i.e., prior year attendance or chronic absenteeism and grade level) to minimize selection bias.

Key Findings



Educators who participated in the Breathe For Chage Mindfulness, SEL, & Yoga Teacher Training reported using more wellness and SEL practices (e.g., breathing, mindful movement, growth mindset) than educators in the comparison group.



K-12 students with one or more Breathe For Change-trained educators in 2023-24:

- - √ had higher attendance rates and
 - ✓ were less likely to be chronically absent than those who did not.



Among K-12 students who were chronically absent in the prior year, those with one or more Breathe For Change-trained educators in 2023-24:

- ✓ had higher attendance rates and
- ✓ lower chronic absenteeism rates than those who did not.

Note: These results were statistically significant at the p < 0.05 level.

Conclusions

Given positive outcome findings, this study meets ESSA evidence requirements for Level II (Moderate Evidence).

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Introduction

Research shows that, in recent decades, educator well-being has declined while the number leaving the profession has increased (Ingersoll, Merril, & May, 2014). In addition to the stress and burnout educators experience, turnover negatively impacts student academic achievement and behavioral outcomes (Ronfeldt, Loeb, & Wyckoff, 2013). Furthermore, research has linked educator job satisfaction with increased student absenteeism, potentially harming teacher-student relationships (Gottfried et al., 2024).

To address this concerning trend, it is critical that educators receive the necessary supports to manage job-related stress for their own well-being and that of their students and school communities. A growing body of literature describes the variety of benefits associated with mindfulness interventions for educators, including improved mental and physical health, job performance, and overall quality of life, (Weare, 2014).

Breathe For Change's mission is to bring wellness, inspiration, and community to every educator and student in the world. The Breathe For Change Mindfulness, Social-Emotional Learning (SEL), and Yoga Teacher Training enhances individual and collective well-being so educators can show up for their students in a way that promotes better academic achievement, behavior, and SEL outcomes in their school community (see logic model in Appendix A; Cavanaugh, Hunt, & Long, 2023). A prior study of the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training found that program graduates reported less stress and burnout, better physical and mental health, and improved self-efficacy for SEL instruction after completing the program (Cavanaugh & Hunt, 2023).

To build on the existing evidence of program impacts and extend findings to student outcomes, Breathe For Change contracted with LearnPlatform by Instructure (LearnPlatform), a third-party edtech research company, to examine whether implementation of their Mindfulness, SEL, & Yoga Teacher Training impacted K–12th grade student attendance and chronic absenteeism (i.e., students who missed 10%+ of school days).

The current study addressed the following research questions:

Teacher Knowledge

1. What were educator perceptions of the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training?

Program Implementation

2. To what extent did district educators implement SEL strategies and wellness practices during the 2023–24 school year?

3. Compared to those who did not participate in the program, did Breathe For Change-trained educators integrate more SEL strategies and wellness practices into their teaching?

Student Outcomes

- 4. Did students with Breathe For Change-trained educators have better 2023—24 attendance rates compared to other students?
 - a. Did this differ among students who were chronically absent during the prior school year?
- 5. Did students with Breathe For Change-trained educators have lower 2024—24 chronic absenteeism rates compared to other students?
 - a. Did this differ among students who were chronically absent during the prior school year?

This report details the study design and methods, implementation, findings, and conclusions.

Methods

This section briefly describes the study participants, measures, and analysis methods. Additional information on the study design and demographics are included in Appendix B.

Study Design, Participants, and Setting

This study used a quasi-experimental design with propensity score matching for the analytic sample¹ to align with ESSA Level II evidence standards. The treatment group included students in K-12th grade whose educator(s) participated in the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training prior to the 2023–24 school year. The comparison group included demographically similar students with comparable prior year attendance who were not enrolled in any Breathe For Change-trained educator classrooms.

Educators. The study included 172 K-12 educators (22 treatment, 150 comparison) across four schools in a mid-size public school district in Massachusetts. More than half of educator participants (52%, n = 90) were K-12 classroom teachers, and 22% were administrators (n = 38). The remaining participants included specialists (10%), social workers (3%), cafeteria and transportation staff (3%), athletic coaches and PE teachers (2%), therapists (2%), teaching assistants (2%), nurses (2%), and school committee members (2%). For student outcomes, 74 educators (20 treatment, 54 comparison) were represented by having students enrolled in their classrooms.

Students. The analysis sample included 955 K—12th grade students in the district for whom 2022-23 and 2023–24 attendance data were available (597 treatment, 358 comparison). More than two-thirds of the student sample was White (79%) and 47% identified as female. Additionally, nearly one third of students (29%) qualified for an individualized education plan (IEP), and very few (0.4%) were categorized as English language learners.

Measures

Researchers used teacher survey data reflecting attitudes towards the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training and their implementation of SEL strategies and wellness practices. Student outcome measures² included student attendance data (from 2022–23 and 2023–24), chronic absenteeism data (from 2022–23 and 2023–24) and demographics from administrative records as measures.

¹ Researchers used nearest neighbor propensity score matching to identify a comparison group with similar prior year attendance. Additional information can be found in Appendix B.

² Researchers also conducted analyses exploring student disciplinary data as an outcome but found no statistically significant effects. Results for these analyses are presented in Appendix C.

Data Analysis

Researchers used descriptive statistics to describe implementation and student characteristics. Researchers then conducted regression models to examine the impact of Breathe For Change Mindfulness, SEL, & Yoga Teacher Training on student attendance and chronic absenteeism rates. All models included propensity scores, prior year attendance or chronic absenteeism (as appropriate), and student grade level as covariates to account for potential selection bias and tested for statistical significance at p < .05, which indicates a 95% probability that the observed relationship is not due to chance.

Researchers used standardized Hedges' g effect size (Hedges, 1981) to characterize the magnitude of statistically significant effects, which typically range from -2 through +2. In terms of educational interventions, a Hedges' g value of 0.05 indicates a small effect, while a value up to 0.20 indicates a moderate effect. A value larger than 0.20 is considered a large effect (Kraft, 2020).

Baseline equivalence. To ensure the validity of study results, researchers conducted baseline equivalence tests on the matched treatment and comparison student samples. These findings are discussed in the Student Outcomes section and referenced in Appendix B. All analyses met What Works Clearinghouse 5.0 (WWC, 2022) baseline equivalence standards.

Teacher Knowledge

All Breathe For Change Mindfulness, SEL, & Yoga Teacher Training graduates completed a survey reporting on their experience with the program. This section summarizes educator responses from the survey.

1

What were educator perceptions of the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training?

Educators reported positive experiences with the Breathe For Change training. One hundred percent of program graduates reported that both the on-demand training curriculum and live Zoom sessions were valuable and indicated a variety of positive outcomes associated with their participation. Nearly all program participants (94%) "strongly agreed" that participation in the program made them feel more confident integrating SEL and wellness into their teaching.

All program graduates "agreed" or "strongly agreed" (100%) that participation:

- ✓ improved their mental, physical, and social-emotional well-being.
- ✓ improved the relationships that matter most to them.
- ✓ enhanced their pedagogy/teaching skills.
- ✓ better equipped them to manage their own stress.
- ✓ gave them the tools to design and facilitate SEL and wellness workshops in their community.
- ✓ inspired them to use wellness as a vehicle for healing and social change.
- ✓ inspired them to continue developing their practice as a yoga teacher.
- ✓ made them feel more motivated and equipped to take care of themselves.
- ✓ better equipped them to help others manage stress.
- ✓ made them feel less stressed and burnt out.

More than 90% of program graduates "agreed" or "strongly agreed" that participation:

- ✓ reconnected them to their passion and purpose.
- ✓ prepared them to teach an inclusive yoga class for their community.
- ✓ enhanced their ability to effectively sequence an inclusive yoga class.
- ✓ made them more engaged in sharing wellness practices with their community.

Program Implementation

The Breathe For Change Mindfulness, SEL, & Yoga Teacher Training includes instructional approaches that many educators might already use in their practice. To understand whether and how usage of such strategies differed between groups, all educators in the participating school district completed a survey. This section summarizes educator responses from the survey to demonstrate how instruction varied between groups during the 2023–24 school year.

2

To what extent did district educators implement SEL strategies and wellness practices during the 2023–24 school year?

Across the district, positive growth mindset strategies were the most commonly used SEL and wellness practices: more than half of educators (57%) reported using them more than once a month. Furthermore, roughly one in four educators reported using emotional awareness (29%), breathing (27%), and communication strategies (27%) more than once a week (see Figure 1).

Apart from positive growth mindset strategies, more than half of the educators reported "never" using SEL strategies and wellness practices. Guided meditation strategies were the least frequently used, with only 15% of educators reporting usage at any time during the 2023–24 school year.



More than one third of district educators used positive growth mindset, emotional awareness, breathing, and communication strategies more than once a month.

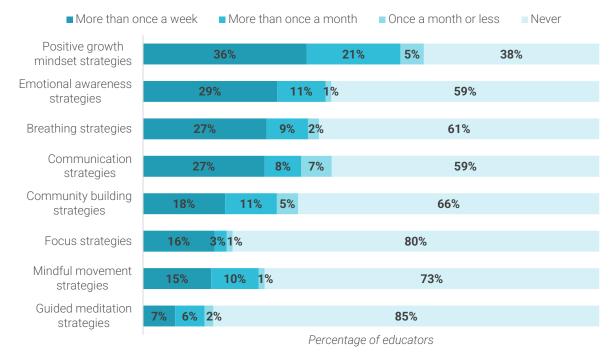


Figure 1. Frequency of SEL strategies and wellness practices used across all educators (n = 172)

3

Compared to those who did not participate in the program, did Breathe For Change-trained educators integrate more SEL strategies and wellness practices into their teaching?

Researchers conducted *t*-tests to examine whether Breathe For Change educators reported using SEL strategies and wellness practices significantly more than the comparison group (see Figure 2). Although some comparison group educators reported using SEL strategies and wellness practices, significantly more program graduates and trainees reported using the strategies across all eight categories (see Appendix B for additional details).



Educators who completed the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training were significantly more likely to report using SEL strategies and wellness practices than those who did not.

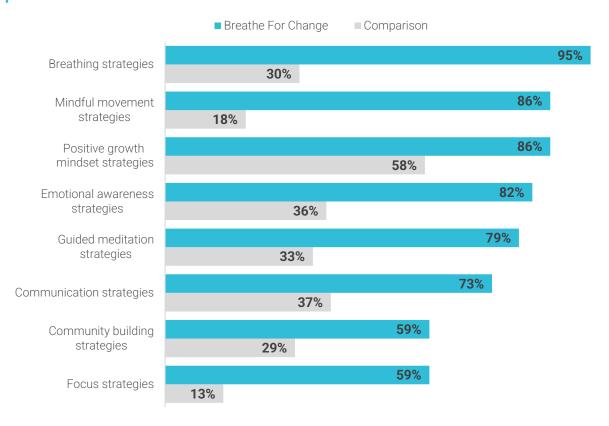


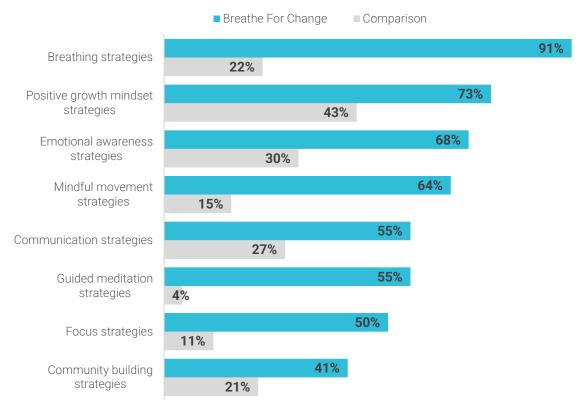
Figure 2. Differences in reported use of SEL strategies and wellness practices between Breathe For Change and comparison educators (n = 172)

Researchers also examined whether the frequency of strategies and practices varied between Breathe For Change and comparison educators. Figure 3 reports on the percentage of educators in both groups that reported using each strategy at least once a week. Although some comparison educators reported using SEL strategies and wellness practices that are taught in the Breathe for Change training during the 2023–24 school year, those who participated in the program reported doing so more frequently.

For example, nearly all (91%) Breathe For Change educators reported using breathing strategies more than once a week, compared to 22% of comparison educators. Furthermore, more than half of Breathe For Change educators (55%) reported using guided meditation strategies at least once a week, compared to 4% of comparison educators.



Educators who completed the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training reported using SEL strategies and wellness practices more frequently than those who did not.



Percentage of educators who reported usage at least once a week

Figure 3. Frequency differences in SEL strategies and wellness practices between Breathe For Change and comparison educators

Finally, researchers further reviewed survey responses from Breathe For Change-trained educators to add context about how and when they implemented the most commonly used program strategies.

The largest difference between Breathe For Change and comparison educators reported use of program practices was observed for *mindful movement strategies* (e.g., Sun Salutations, Peaceful Warrior Practice, Partner/Community Mindful Movement).

More than 80% of Breathe For Change educators reported using the strategies listed below to settle students into learning and to facilitate relaxation for readiness to learn at least once per week:

- ✓ Breathing strategies (e.g., Belly Breathing, 3 Collective Breaths), which were also used to provide students a brain break during or after learning and to help transition students between activities.
- ✓ **Positive growth mindset strategies** (e.g., Intention Setting, Affirmations), which were also used to foster creative thinking.
- ✓ **Emotional awareness strategies** (e.g., 2 Word Check In, Weather Report), which were also used to build community in the classroom and to redirect students back on task.

The following section details the impact of having at least one Breathe For Change educator during the 2023-24 school year on student attendance and chronic absenteeism rates. Researchers conducted regression models with a propensity scored matched sample of students (see Appendix C for full model results). Researchers reported statistically significant findings at the p < 0.05 level. Significant findings are reported in **green text** with an asterisk.

Did students with Breathe For Change-trained educators have better 2023—24 attendance rates compared to other students?

a. Did this differ among students who were chronically absent during the prior school year?

Results from regression models indicated a statistically significant impact of having at least one Breathe For Change educator during the 2023-24 school year on student attendance (p < 0.05; see Figure 4). On average, students who enrolled in at least one treatment teacher classroom had a higher attendance rate (92%, SE = 0.003) compared to students who were only enrolled in comparison teacher classrooms (91%, SE = 0.002), translating to an effect size of g = 0.13 (i.e., a "moderate" effect; Kraft, 2020).



K—12 students who had at least one Breathe For Change-trained educator during the 2023—24 school year had significantly higher attendance rates than those who did not.

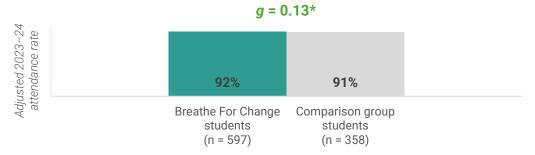


Figure 4. Comparison between adjusted average 2023—24 attendance rates among students who were and were not enrolled in Breathe For Change educator classrooms

Subgroup analyses among students who were chronically absent during the prior school year (i.e., missing 10% or more school days) indicated a statistically significant impact of having at least one Breathe For Change educator (p < 0.05; see Figure 5). On average, chronically absent students who enrolled in at least one Breathe For Change educator classroom had a higher attendance rate (86%, SE = 0.008) than those enrolled in comparison teacher classrooms (82%, SE = 0.009), translating to an effect size of g = 0.34 (i.e., a "large" effect; Kraft, 2020).



Among students who were chronically absent in the prior school year, those who had at least one Breathe For Change-trained educator had significantly higher attendance rates during the 2023—24 school year.

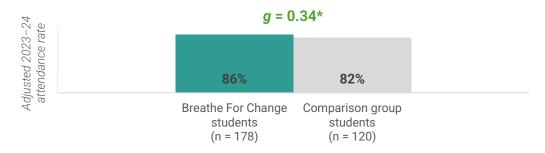


Figure 5. Comparison between adjusted average 2023—24 attendance rates among chronically absent students who were and were not enrolled in Breathe For Change educator classrooms

5

Did students with Breathe For Change-trained educators have lower 2023—24 chronic absenteeism rates compared to other students?

a. Did this differ among students who were chronically absent during the prior school year?

Results indicated a statistically significant impact of having at least one Breathe For Change educator (p < 0.05; see Figure 6). Overall, students who enrolled in at least one Breathe For Change educator classroom had lower chronic absenteeism rates in 2023—24 (28%, SE = 0.02) compared to students who were enrolled in comparison teacher classrooms (33%, SE = 0.01), translating to an effect size of g = 0.11 (i.e., a "moderate" effect, Kraft, 2020).



K-12 students who had at least one Breathe For Change-trained educator during the 2023-24 school year had significantly lower rates of chronic absenteeism.

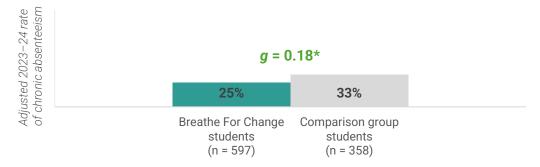


Figure 6. Comparison of 2023—24 chronic absenteeism rates between students who were and were not enrolled in Breathe For Change educator classrooms

Researchers investigated whether chronic absenteeism in 2023-24 differed among students who were chronically absent in the prior year. Results indicated a statistically significant impact of having at least one Breathe For Change educator (p < 0.05; see Figure 7). Among students who were chronically absent in 2022-23, those who enrolled in at least one Breathe For Change educator classroom had lower chronic absenteeism rates in 2023-24 (63%, SE = 0.04) compared to students who were enrolled in comparison teacher classrooms (78%, SE = 0.01), translating to an effect size of g = 0.31 (i.e., a "large" effect, Kraft, 2020).



Among students who were chronically absent in the prior school year, those who had at least one Breathe For Change-trained educator during the 2023—24 school year had significantly lower rates of chronic absenteeism.

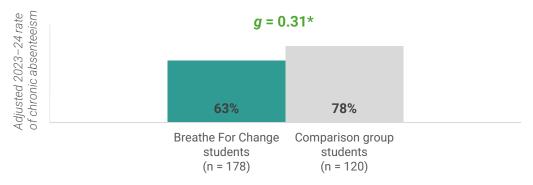


Figure 7. Comparison of 2023—24 chronic absenteeism rates between students who were and were not enrolled in Breathe For Change educator classrooms among students who were chronically absent in 2022—23

Conclusions

This study contributes to the growing body of evidence supporting the positive impact of mindfulness interventions on educator well-being and, subsequently, on student outcomes. By demonstrating a link between Breathe For Change's program and reduced chronic absenteeism, this study further demonstrates the importance of investing in educators' mental and emotional health. Breathe For Change offers a promising approach to fostering a more supportive and sustainable environment for both educators and students, ultimately contributing to improved academic and social-emotional outcomes.

Given multiple positive outcome findings, this study provides results to satisfy ESSA evidence requirements for Level II (*Moderate Evidence*). Specifically, this quasi-experimental study met the following criteria:

- Y Proper design and implementation
- Baseline equivalence for treatment and comparison groups
- ✓ Statistical controls through covariates
- ✓ At least 350 students in the analysis sample
- ▼ Representative, multi-site study
- At least one statistically significant, positive finding

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Appendix A. Breathe For Change Logic Model



Problem Statement: Educator stress and burnout leads to higher rates of turnover and undesirable school climate. Breathe For Change's mission is to bring wellness, inspiration, and community to every educator and student in the world. The 200-hour Mindfulness, SEL, and Yoga Teacher Training enhances individual and collective well-being so educators can show up for their students in a way that will lead to higher academic achievement and improved social emotional learning outcomes throughout the school.

Inputs	Participants	Activities	Outputs		Outcomes	
What we invest:	Who we reach:	What we do:	Products of activities:	Short-term	Intermediate	Long-term
Breathe For Change's CASEL aligned transformational training model for self and community well-being: 200-hour online Mindfulness, Social and Emotional Learning (SEL), and Yoga Teacher Training Curriculum Live, interactive training sessions (72 hrs.) Asynchronous SEL/Yoga training curriculum modules (34 modules, 128 hrs.) 200-Hour Yoga Teacher Certification (CYT - 200), trainees qualified for Yoga Alliance certification and to teach inclusive and trauma-informed yoga classes to both adults and young people Social-Emotional Learning Facilitator (SEL*F) certification, qualified to lead wellness and social-emotional learning professional development and programs Breathe For Change's online platform facilitates participant collaboration and community building before, during, and after training, and supports ongoing practice with additional training modules	Teachers & Support Staff School and District Leaders School Community Support Staff	Participants attend or review 72 hours of live training sessions Participants complete 128 hours of asynchronous Mindfulness, SEL, and Yoga Teacher Training Curriculum modules online Participants develop an SEL Capstone Project, implement it in their community, and reflect on their facilitation Participants complete performance assessment by co-teaching 1 hour phsyical yoga class that is mentor-observed via rubric to provide immediate, standardized performance feedback Participants engage, connect, and collaborate with their Community Group of fellow trainees, plus a mentor, during training and after graduation Participants use online platform to engage and connect with the larger online network of Breathe For Change users, including program trainees, graduates, mentors and trainers	Number of live training sessions attended Number of asynchronous training modules completed Number of SEL Capstone Projects implemented Number of trainee performance assessment rubrics completed Number of CYT-200/ Breathe For Change SEL*F certifications granted Number of engagements with Community Group during training Percentage of graduates who opt to continue their online platform subscription Percentage of trainees who plan to register for advanced 300-hour Transformative TEACHing and Leadership Training	Participants learn new SEL, yoga, and mindfulness practices for their own wellness Transformation of Relations Participants begin to understand how individual wellness relates to improved relationships Participants share wellness practices with other staff and members of their community Transformation of Community Participants bring mind-body wellness and SEL practices, information, and resources to local community	Participants' work and personal relationships begin to improve	Teacher burnout decreases Teacher retention rates increase Student SEL outcomes and academic achievement improve Student out-of-class behavioral placements decrease Participants cultivate positive, supportive relationships with students and peers Participants regularly teach yoga, mindfullness, and SEL strategies to colleagues and students Participants regularly teach yoga, mindfullness, and SEL strategies in their community Community members benefit from integrating wellness practices that raise overall community wellbeing

Appendix B. Methods & Demographics

The following section provides greater detail to the methods and demographics included in the study.

Table B1. Student demographics by group and overall

	Breathe For Change Students (n = 597)	Comparison Group Students (n = 358)	Total (n = 955)
Female	49%	44%	47%
Race/Ethnicity			
White	80%	78%	79%
Multiracial	10%	9%	10%
Hispanic/Latino	8%	8%	8%
Black	2%	3%	2%
Asian	0.5%	1%	1%
Native American/Alaskan	0.2%	1%	0.4%
Pacific Islander	0.2%	0%	0.1%
English learner status	0.6%	0%	0.4%
IEP status	27%	32%	29%

Table B2. Student sample size by group and grade level

Grade Level	Breathe For Change Students	Comparison Group Students	Total
Total	597	358	955
Kindergarten	39	15	54
Grade 1	59	31	90
Grade 2	87	1	88
Grade 3	87	1	88
Grade 4	66	14	80
Grade 5	63	30	93
Grade 6	44	18	62
Grade 7	6	59	65
Grade 8	3	69	72
Grade 9	38	24	62
Grade 10	42	20	62
Grade 11	48	31	79
Grade 12	15	45	60

Study Design

This study used a quasi-experimental design with a propensity score matched sample and covariate adjustments to align with ESSA Level II evidence standards. The treatment group included students enrolled in classrooms with at least one educator who participated in the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training prior to the 2023–24 school year and the comparison group included students whose educators did not participate in any Breathe For Change training.

Measures

Researchers used teacher survey data reflecting perceptions towards the Breathe For Change Mindfulness, SEL, & Yoga Teacher Training and their implementation of SEL strategies and mindfulness practices. The study also included student attendance and chronic absenteeism data (from 2022—23 and 2023—24), and demographics from administrative records as measures.

Propensity Score Matching

Researchers used nearest neighbor propensity score matching with a 0.05 caliper to calculate propensity scores for the analytic sample. To calculate propensity scores, researchers conducted binary logistic regression with student group as the dependent variable and 2022—23 attendance rate and count of disciplinary offenses as covariates. The final analytic sample included 955 students (597 treatment and 358 comparison).

Baseline Equivalence

Once researchers calculated propensity scores, they conducted baseline equivalence using regression models predicting prior year attendance, disciplinary offenses, and demographics. The results of baseline equivalence analyses are included in Table B3.

Because treatment and comparison groups did not have significant Hedges' *g* values above 0.25 for prior attendance or disciplinary offenses, researchers considered groups equivalent for subsequent analyses (WWC, 2022). Due to the significant Hedges' *g* value for prior year chronic absenteeism and grade, both were included in analyses as covariates.

Table B3. Baseline equivalence of prior year attendance and demographics

Table 63. Baseline equivalence of prior year attendan	Breathe For Change students	Comparison group students	Hedges' g	p - value	Equivalent for analyses?
All students	n = 597	n = 358			
2022—23 attendance rate	92% (0.07)	90% (0.09)	0.24	0.11	✓
2022-23 chronic absenteeism rate	30% (0.46)	34% (0.47)	-0.08*	0.01	✓
2022-23 disciplinary offenses	4.88 (11.58)	8.10 (16.21)	-0.23	0.48	✓
Grade	4.81 (3.50)	7.30 (3.39)	-0.72*	<0.001	*
Gender	1.51 (0.50)	1.43 (0.50)	-0.07	0.34	✓
Race/ethnicity	6.47 (1.12)	6.36 (1.31)	0.09	0.23	✓
EL status	1.99 (0.08)	2.00 (0.00)	-0.12	0.15	✓
IEP status	1.73 (0.45)	1.70 (0.46)	0.06	0.53	✓
Chronically absent in 2022-23	n = 178	n = 120			
2022-23 attendance rate	84% (0.07)	80% (0.10)	0.48	0.42	✓
2022-23 disciplinary offenses	7.16 (13.84)	11.24 (19.11)	-0.24	0.61	✓
Grade	5.15 (3.90)	7.42 (3.55)	-0.61*	<0.001	*
Gender	1.51 (0.50)	1.60 (0.49)	-0.18	0.16	✓
Race/ethnicity	6.35 (1.18)	6.33 (1.41)	0.01	0.88	✓
EL status	1.99 (0.07)	2.00 (0.00)	-0.11	0.58	\checkmark
IEP status	1.68 (0.47)	1.62 (0.49)	0.13	0.32	✓

Table B4. t-test results comparing Breathe For Change strategy usage between groups

Strategy	Breathe F	Compa (n =	p - value		
	Mean	SE	Mean	SE	value
Breathing strategies	1.95	0.05	1.30	0.04	<0.001
Emotional awareness strategies	1.82	0.08	1.37	0.04	<0.001
Positive growth mindset strategies	1.86	0.07	1.58	0.04	0.01
Mindful movement strategies	1.86	0.07	1.18	0.03	<0.001
Guided meditation strategies	1.79	0.10	1.35	0.10	0.003
Focus strategies	1.59	0.11	1.13	0.03	<0.001
Communication strategies	1.73	0.10	1.37	0.04	0.002
Community building strategies	1.59	0.11	1.30	0.04	0.01

Appendix C. Regression Model Results

To examine differences on attendance between students who did and did not have Breathe For Change educators, researchers ran multiple regression models with 2023—24 attendance as the outcome and included study condition, 2022—23 attendance, grade level, and propensity scores as covariates. For subgroup analyses of students who were chronically absent in the prior year, the model included study condition, 2022—23 attendance, grade level, and propensity scores as covariates.

Table C1. Regression model results examining impact of having a Breathe For Change educator on attendance

2023-24 Attendance	Coefficient	Standard Error	t – value	p – value	Hedges' g
All students (n = 955)	0.12	0.005	2.76	0.01	0.13*
Chronically absent in prior year $(n = 298)$	0.04	0.01	3.37	0.001	0.34*

To examine differences on chronic absenteeism between students who did and did not have Breathe For Change educators, researchers ran a multiple regression model with 2023–24 chronic absenteeism as the outcome and included study condition, 2022–23 chronic absenteeism, grade level, and propensity scores as covariates. For subgroup analyses of students who were chronically absent in the prior year, the model included study condition, 2022–23 attendance, grade level, and propensity scores as covariates.

For this set of models, a negative coefficient and *t*-value indicates a positive impact of Breathe For Change (i.e., those in the treatment group had lower rates of chronic absenteeism). Hedges' *g* values have been reverse coded for ease of interpretation.

Table C2. Regression model results examining impact of having a Breathe For Change educator on chronic absenteeism

2023-24 Chronic Absenteeism	Coefficient	Standard Error	t – value	p – value	Hedges' g
All students (n = 955)	-0.08	0.02	-3.38	0.001	0.18*
Chronically absent in prior year $(n = 298)$	-0.14	0.05	-2.58	0.01	0.31*

To examine differences on disciplinary offenses between students who did and did not have and Breathe For Change educators, researchers ran multiple regression models with 2023—24 disciplinary offenses as the outcome and included study condition, 2022—23 disciplinary offenses, grade level, and propensity scores as covariates.

For this set of models, a negative coefficient and *t*-value indicates a positive impact of Breathe For Change (i.e., those in the treatment group had fewer disciplinary offenses). Hedges' *g* values have been reverse coded for ease of interpretation. No findings were statistically significant.

Table C3. Regression model results examining impact of having a Breathe For Change educator on discipline

2023-24 Discipline	Coefficient	Standard Error	t – value	p – value	Hedges' g
All students (n = 955)	-0.45	0.79	-0.57	0.57	0.04
1+ disciplinary offenses in prior year $(n = 540)$	-0.46	1.32	-0.35	0.73	0.03