Responsive Classroom®

Teacher Belief Study

Analysis of how effectively teachers acquire and strengthen beliefs aligned with *Responsive Classroom* practices after attending a four-day *Responsive Classroom* course.

Center for Responsive Schools, Inc.

Karen Poplawski
Director of Programs

Clara-Christina E. Gerstner, M.Phil.
Research Assistant

July, 2020

CENTER FOR RESPONSIVE SCHOOLS

Teacher Belief Study

CONTENTS
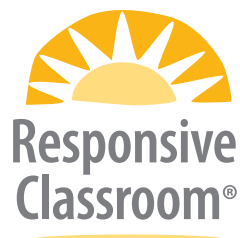
Introduction

Teachers are the centerpiece of every effort to improve student learning, and this is no less true when it comes to the implementation of social and emotional approaches and curriculum. Research indicates that a teacher's belief system has significant influence on the extent to which teachers embrace implementing new teaching and discipline practices or a new curriculum. Those teachers who find their ideology in line with a new program or curriculum usually support it, whereas others may resist change due to their conflicting beliefs.

For these reasons, the *Responsive Classroom* approach aims to foster a unique set of teacher beliefs that are considered to be critical to teachers' educational approach. Teacher beliefs emphasized throughout our professional development are closely aligned with *Responsive Classroom* practices and foster the successful implementation of social-emotional learning (SEL). Throughout *Responsive Classroom* courses, teachers are encouraged to reflect on their beliefs and describe how their beliefs and their actions affect their classroom learning community.
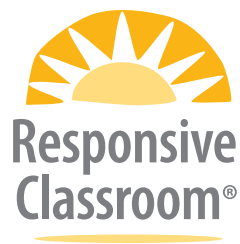
Study

The two-year Teacher Belief Study was designed to analyze how effectively teachers acquire and strengthen beliefs aligned with *Responsive Classroom* practices after attending a four-day *Responsive Classroom* course. Center for Responsive Schools (CRS) conducted the study by having educators take a survey before and after they participated in either the Elementary Core Course or the Middle School Course. The survey items were based on eight teacher belief domains (see Table 1) that CRS identified as critical to teachers' educational approach.

Conditions for Learning.. **CL**

Conditions for Effective Teaching............................... **ET**

Goal of Discipline.. **GD**

Goodness of Student Intentions .... **GS**

Nature of Learning .... **NL**

Purpose of Education... **PE**

Role of SEL in Learning.. **RL**

Role of School and Classroom Environment............. **SC**

Table 1 — Teacher Beliefs

The Teacher Belief Survey was developed by CRS staff including course facilitators, instructional developers, and researchers in Spring 2019 and piloted in July/August 2019. In year one, a total of 1,786 educators took the pre-survey, and 703 educators took the post-survey. We were able to match the pre- and post-survey data of 690 participants for this analysis, allowing us to assess changes that occurred. In year two, the Teacher Belief Survey was revised (based on our findings in the previous year) and re-administered in May-July 2020. A total of 1,272 educators responded to the pre-survey and 402 educators responded to both the pre- and post-survey.

Key Findings

The results of year one of the study showed that *Responsive Classroom* courses significantly change teacher beliefs (see Figure 1). Teacher beliefs in all eight domains increased. The largest changes occurred for the Goal of Discipline (domain 3) and Goodness of Student Intentions (domain 4). The results of year two of the study support our previous findings. Changes in teacher beliefs for the Goal of Discipline (domain 3) and Goodness of Student Intentions (domain 4) were the largest. Changes in year two were overall slightly larger than in year one. The reliability estimate (Cronbach's alpha) for the entire survey for year one and year two is large, which indicates that the survey has high consistency.

Figure 1 — Summary of Changes in Teacher Belief Domains
All numbers represent percent of change.

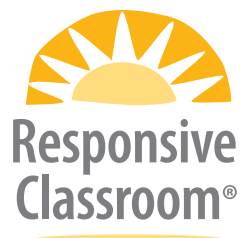*Year 1 — 2019 Course Participants*
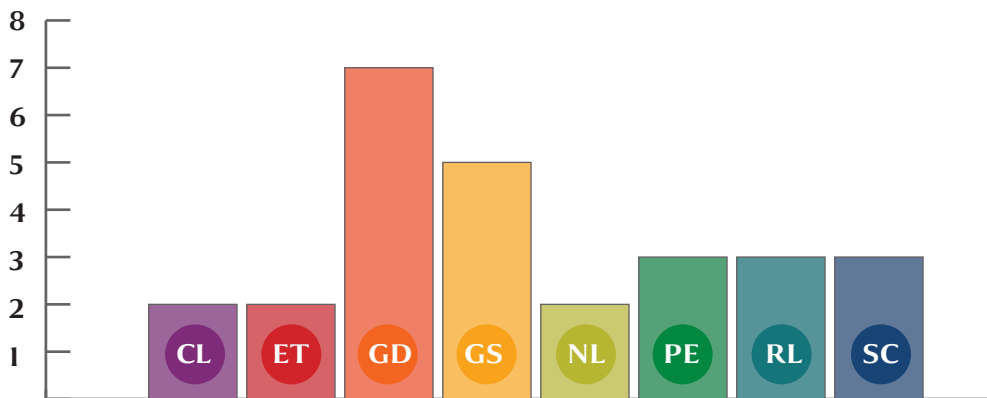
Year 2 — 2020 Course Participants
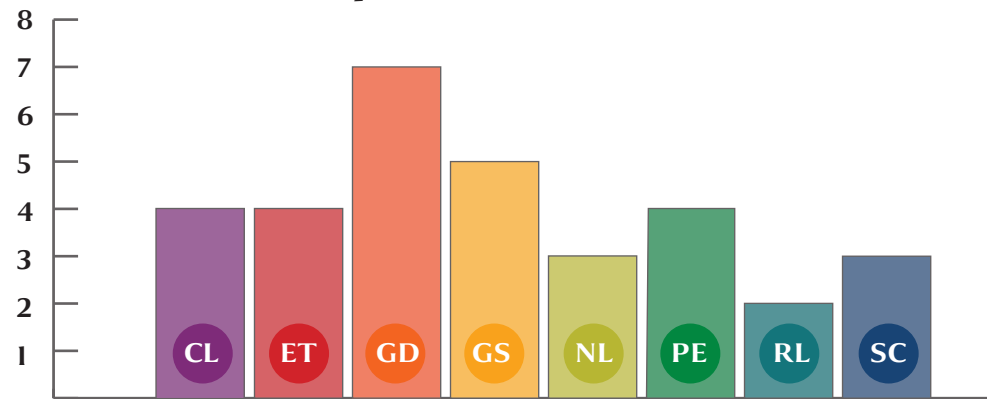
Responsive Classroom courses demonstrate a statistically significant change in beliefs (Gerstner, 2020).[1]

[1]The t-test is statistically significant at the 1 percent level.

Significance

Discipline is one of the greatest promoters of inequity. We know from research that "students of color and low-income students, who are more likely to experience external stressors outside of school, are less likely than their peers to report high levels of support, safety, and trust in school, and they are more likely to experience punitive disciplinary practices" (The Aspen Institute National Commission on Social, Emotional, and Academic Development, 2019). We also know that "black American students are far more likely to be suspended or expelled and, conditional on an office referral, more likely to receive stiffer punishments. These disparities […] are associated with long-term outcomes, including employment and involvement in the criminal justice system" (Riddle & Sinclair, 2019).

Responsive Classroom courses have the biggest impact on teachers' beliefs about two of the key factors that inform a teacher's approach to teaching and discipline: the Goal of Discipline and Goodness of Student Intentions.

- **Goal of Discipline:** Belief that the goal of discipline is to teach students to be in control of themselves and to choose socially and morally responsible behavior because it is the right thing to do, not because of fear of punishment or hope of reward. Belief that teaching students self-discipline and self-control develops goal-setting, problem-solving, and critical thinking skills and helps them to become good citizens who exhibit prosocial behaviors and demonstrate respect for self, others, and property.

- **Goodness of Student Intentions:** Belief that educators should hold and communicate positive beliefs and expectations for all students, including those who may have different values than they do; are culturally, racially, or socioeconomically different from them; who appear disengaged and unmotivated; or who struggle and misbehave. Belief that problem behaviors result from unmet needs or lack of skills rather than the student's character, family background, or intention to do harm.

By matching these changes in beliefs with actionable practices, *Responsive Classroom* courses position educators to become change agents who can address systemic educational disparities and inequities by embracing a nonpunitive approach to discipline and using what they know and believe about their students to inform their approach to discipline.

Recommendations

Educators seeking to bring about systemic school change to address issues of equity would benefit from the use of the *Responsive Classroom* approach and individuals currently implementing the *Responsive Classroom* approach should pay particular attention to nurturing change in beliefs alongside concrete *Responsive Classroom* practices to create the equitable systemic conditions for social, emotional, and academic learning.

Related Resources

Creating Equity Using *Responsive Classroom*

www.responsiveclassroom.org/wp-content/uploads/2020/07/RC_Creating_Equity-upload.pdf

Teacher Belief Study

Introduction

Teachers are considered by many to be the centerpiece of educational change (Datnow & Castellano, 2000). Researchers have observed that teachers must see themselves as the originators of change for school reforms to be effective. Those teachers who find their ideology in line with a new program or curriculum usually support it, whereas others may resist change due to their conflicting beliefs. Ignoring existing teacher beliefs and attitudes is one of the most common pitfalls in the design and implementation of a new program, but one that can and should be avoided.

Teacher beliefs can be defined as a proposition about teaching and learning "which may be consciously or unconsciously held, is evaluative in that it is accepted as true by the individual, and is therefore imbued with emotive commitment; further, it serves as a guide to thought and behavior" (Borg, 2001, p. 186). Teacher beliefs affect different aspects of teaching and learning, such as instructional practices, student discipline, classroom community, etc. The past 40 years of empirical research has shown that teacher beliefs differ among teachers based on characteristics such as age, experience level, gender, and/or teaching assignment (e.g., Castellano & Datnow, 2000). Thus, teacher beliefs usually evolve and are shaped by the surroundings and experiences a teacher makes throughout their teaching career (e.g., Mansour, 2009; Fives & Gill, 2014).

The *Responsive Classroom* approach aims to foster a unique set of teacher beliefs. Teacher beliefs emphasized throughout our professional development are closely aligned with *Responsive Classroom* practices and foster the successful implementation of social-emotional learning (SEL). Throughout *Responsive Classroom* courses and workshops, teachers are encouraged to reflect on their beliefs and describe how their beliefs and their actions affect their classroom learning community. For example, the four-day Responsive Classroom Elementary Core Course and Middle School Course introduce a framework for providing students logical consequences to misbehavior to help build and maintain positive student-teacher relationships. At the same time, they encourage teachers to reflect on their understanding and experiences with discipline and how their beliefs about discipline affect their practice.

Study Overview

Purpose

The Teacher Belief Study was developed to examine an overarching goal of *Responsive Classroom* courses, which is to allow teachers to acquire and strengthen beliefs aligned with *Responsive Classroom* practices and turn these beliefs into concrete actions in their classroom. In total, Center for Responsive Schools (CRS) identified eight teacher belief domains (see Table 2) that are considered to be critical to teachers' educational approach. The Teacher Belief Survey was created in alignment with those eight teacher belief domains. The goal of the survey was to assess and measure the change in teachers' beliefs and attitudes for each domain before and after they participated in a four-day *Responsive Classroom* course—either the Elementary Core Course or the Middle School Course.

Domains

The CRS teacher belief domains were developed by CRS staff including workshop facilitators, instructional developers, and researchers. They are also based on current findings in the literature on teacher beliefs. The eight domains used by CRS encompass beliefs about the conditions for teaching, conditions for learning, the nature of learning, the purpose of education, the goal of discipline, the role of SEL, interpreting student intentions, and the role of the school and classroom community. Each domain is defined in Table 2.

Table 2 — Teacher Belief Domains

Conditions for Learning **CL** — Belief that students learn best in environments of high expectations that are student-centered, developmentally responsive, academically challenging, and safe to make learning mistakes.

Conditions for Effective Teaching **ET** — Belief that teaching is most effective when lessons are planned and designed with knowledge of students, including evidence-based practices and strategies, and offer learning goals and instructional activities that are directly related to expectations for what a student should know and be able to do at the end of the instructional chunk.

Goal of Discipline **GD** — Belief that the goal of discipline is to teach students to be in control of themselves and to choose socially and morally responsible behavior because it is the right thing to do, not because of fear of punishment or hope of reward. Belief that teaching students self-discipline and self-control develops goal-setting, problem-solving, and critical thinking skills and helps them to become good citizens who exhibit prosocial behaviors and demonstrate respect for self, others, and property.

Goodness of Student Intentions **GS** — Belief that educators should hold and communicate positive beliefs and expectations for all students, including those who may have different values than they do; are culturally, racially, or socioeconomically different from them; who appear disengaged and unmotivated; or who struggle and misbehave. Belief that problem behaviors result from unmet needs or lack of skills rather than the student's character, family background, or intention to do harm.

Nature of Learning **NL** — Belief that learning is cognitively constructed and relies on social, emotional, and cooperative processes. Belief that learning builds on prior knowledge, is facilitated through choice and through understanding of students' context and interests, and becomes transferrable to a new context when there is an emphasis on process as well as outcome. Belief that changes in the learner happen because of the learning experience.

Purpose of Education **PE** — Belief that the purpose of education is to build in students a social consciousness and a strong sense of self; to cultivate the attitudes and dispositions of good citizenship; and to teach students to participate in the democratic process. Belief that education should provide new experiences and open windows for students to see and pursue a bright future for themselves, their families, and their local and global communities. Belief that the purpose of education is to enable students to read, speak, write, and listen well; to work well with numbers and technology; to think, reason, wonder, and be curious; to appreciate and value music, art, culture, movement, and athletics; and to manage themselves and know how to cooperate well with others.

Role of SEL in Learning **RL** — Belief that the social and emotional curriculum has equal weight as the core academic curriculum and that social and emotional learning includes (a) school and classroom environments that support the development of social and emotional learning skills and (b) time and resources given for explicit instruction in social and emotional skill development.

Role of School and Classroom Environment **SC** — Belief that the school and classroom are a community in which all students belong, can operate autonomously and responsibly, and feel represented, welcome, and accepted as members of the school and academic community.

Teacher Belief Survey

In order to assess and measure the change in teachers' beliefs and attitudes for each of the eight teacher belief domains, the survey, which participants took before and after attending a four-day *Responsive Classroom* course, was structured as follows:

- Each domain was captured in 5–6 items for a total of 41 survey items mapped to eight teacher belief domains (see Table 2).
- Respondents could select answers for each item from a 5-point Likert scale which ranged from "Strongly Disagree" (1) to "Strongly Agree" (5).
- Twelve of the 41 items were reverse-coded, meaning respondents were expected to disagree with those items rather than agree.
- Items were written in a way that teachers in all grade levels (K–8) could relate to.
- In the revision process, close attention was paid toward improving the clarity of language, alignment of items to *Responsive Classroom* practices, and coverage of the teacher belief domains.
- Items were randomized so that participants would not be influenced by the domains.
- Items were piloted with a small group of teachers in spring 2019 and revised for administration during the summer 2019 *Responsive Classroom* courses.
- In spring 2020, items were revised again based on study findings from the previous year. In total, six survey items were rewritten, and one additional item was added.

Data Collection

Year 1 — 2019 Course Participants

CRS conducted the Teacher Belief Survey between July 9, 2019, and August 13, 2019. During the weeks of July 9, July 16, July 23, July 30, or August 13, educators were asked to respond to this survey both before and after they attended an advertised four-day course, and this data was collected with Question-Pro. Courses were hosted by CRS and took place in various locations across the country. A total of 1,786 educators took the pre-survey. Of those educators, 1,257 identified as an elementary school teacher, 289 identified as a middle school teacher, 148 identified as an administrator, and 158 identified as "other." Across 41 questions, there were 442 missing values from these respondents. As 2,465 educators were initially sent an email request to participate in this survey, the response rate for the pre-survey was 72.49%.

The Teacher Belief Survey was conducted both before and after teachers attended a *Responsive Classroom* course. A total of 703 educators took the post-survey. Of those educators, 691 identified as an elementary school teacher, 111 identified as a middle school teacher, 56 identified as an administrator, and 69 identified as "other." Across 41 questions, there were 45 missing values from these respondents. As 1,807 educators were initially sent an email request to participate in this survey, the response rate for the post-survey was 38.9%.

We were able to match the pre- and post-survey data of 690 participants for this analysis. We calculated difference scores for each teacher belief domain, which indicate the amount of change between the two time periods. The average difference was tested using a paired t-test. All of our findings are presented in the next section.

Year 2 — 2020 Course Participants

Data collection for the 2020 Teacher Belief Survey took place between May 28 and July 7. Overall, 1,272 educators filled out the pre-survey. A total of 402 participants filled out both the pre-and post-survey which our change analysis is based on. As 3,120 educators were initially sent the survey via email, our response rate was 86% (participants who both viewed the survey and completed it). The response rate for the post-survey was only 32%. On average, it took study participants 12 minutes to complete the pre-survey.

Findings

Data Snapshot

Our main findings are presented in Table 3. For each of the teacher belief domains, the table displays the pre-survey and post-survey averages for 690 respondents (year one) and 402 respondents (year two). Column 3 displays the difference scores. All changes are positive, and the t-test is statistically significant at the 1 percent level, meaning the increase in scores is significant and probably not due to chance variation. Changes in 2020 are slightly larger than in 2019.

Table 3 – Changes in Teacher Belief Domains

Year 1 — 2019 Course Participants

		PRE	POST	DIFF	T	P-VALUE
CL	CONDITIONS FOR LEARNING	4.07	4.13	0.06	3.71	0.000
ET	CONDITIONS FOR EFFECTIVE TEACHING	3.82	3.90	0.07	3.09	0.002
GD	GOAL OF DISCIPLINE	3.95	4.28	0.32	10.18	0.000
GS	GOODNESS OF STUDENT INTENTIONS	4.13	4.40	0.27	10.35	0.000
NL	NATURE OF LEARNING	3.89	4.00	0.10	5.43	0.000
PE	PURPOSE OF EDUCATION	4.49	4.62	0.16	7.34	0.000
RL	ROLE OF SEL IN LEARNING	4.50	4.63	0.13	5.45	0.000
SC	ROLE OF SCHOOL AND CLASSROOM ENVIRONMENT	4.46	4.62	0.16	7.65	0.000
	OVERALL	4.16	4.31	0.16	9.72	0.000

Year 2 — 2020 Course Participants

		PRE	POST	DIFF	T	P-VALUE
CL	CONDITIONS FOR LEARNING	4.332	4.536	0.204	7.219	0.000
ET	CONDITIONS FOR EFFECTIVE TEACHING	4.093	4.274	0.181	5.582	0.000
GD	GOAL OF DISCIPLINE	4.012	4.364	0.352	8.317	0.000
GS	GOODNESS OF STUDENT INTENTIONS	4.264	4.512	0.248	7.905	0.000
NL	NATURE OF LEARNING	4.267	4.431	0.164	5.453	0.000
PE	PURPOSE OF EDUCATION	4.467	4.654	0.187	6.654	0.000
RL	ROLE OF SEL IN LEARNING	4.526	4.641	0.115	3.943	0.000
SC	ROLE OF SCHOOL AND CLASSROOM ENVIRONMENT	4.493	4.636	0.143	5.476	0.000
	OVERALL	4.313	4.511	0.198	8.178	0.000

Figure 2 provides a visual summary of our main findings for year one and year two of the study. It displays the average change for each of the eight teacher belief domains.
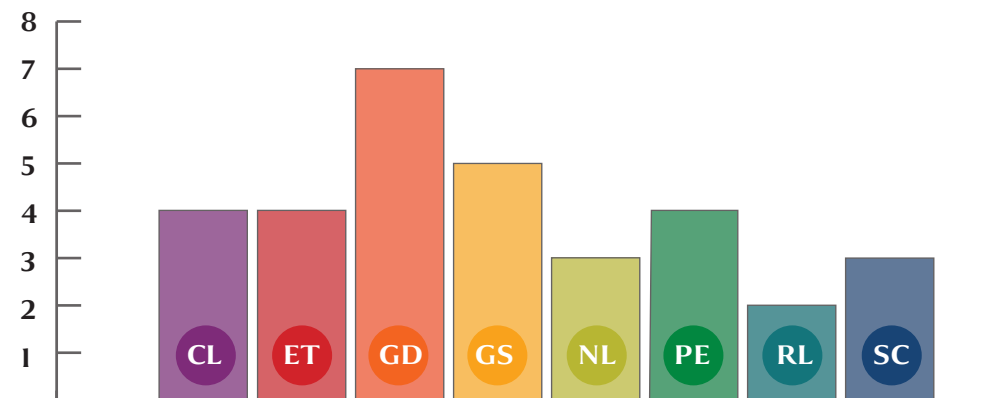
Figure 2 – Summary of Changes in Teacher Belief Domains

All numbers represent percent of change.

Year 1 — 2019 Course Participants
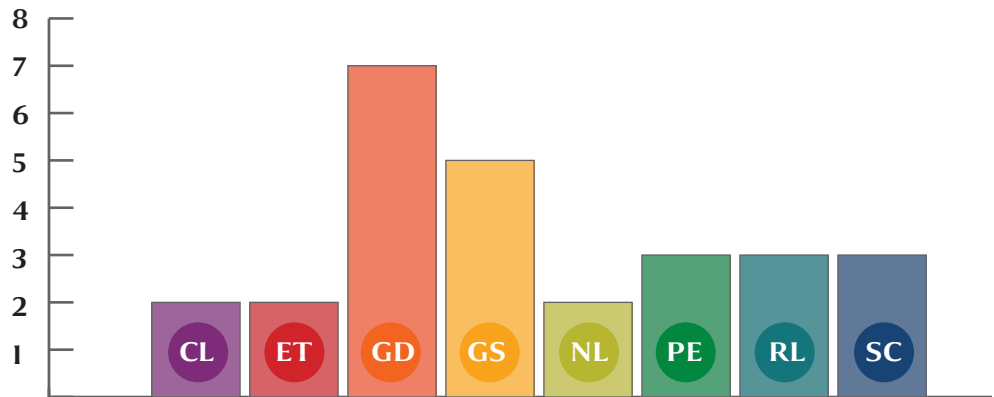
Year 2 — 2020 Course Participants

Responsive Classroom courses demonstrate a statistically significant change in beliefs (Gerstner, 2020).[2]

_____

[2]The t-test is statistically significant at the 1 percent level.

We found the largest changes in teacher beliefs for the Goal of Discipline (domain 3) and Goodness of Student Intentions (domain 4):

- **Goal of Discipline:** Belief that the goal of discipline is to teach students to be in control of themselves and to choose socially and morally responsible behavior because it is the right thing to do, not because of fear of punishment or hope of reward. Belief that teaching students self-discipline and self-control develops goal-setting, problem-solving, and critical thinking skills and helps them to become good citizens who exhibit prosocial behaviors and demonstrate respect for self, others, and property.

- **Goodness of Student Intentions:** Belief that educators should hold and communicate positive beliefs and expectations for all students, including those who may have different values than they do; are culturally, racially, or socioeconomically different from them; who appear disengaged and unmotivated; or who struggle and misbehave. Belief that problem behaviors result from unmet needs or lack of skills rather than the student's character, family background, or intention to do harm.

Both domains are made up of five items. Item 13, which is part of domain 3, is the item with the largest positive change. The item states that "the most effective way to discipline students is to reinforce desired behavior through rewards or punishment" which is a reverse-coded item (we expected teachers to disagree with this statement). This item is closely aligned with the beliefs and practices of the *Responsive Classroom* approach which are communicated throughout the *Responsive Classroom* courses.

We found the smallest changes in teacher beliefs for the Conditions for Learning (domain 1) and Conditions for Effective Teaching (domain 2). Both domains had items that were probably not well formulated and not well understood by teachers and that were rewritten in the newest version of the Teacher Belief Survey (e.g., responses on items 19 and 31 decreased after teachers participated in the course).

Changes for domains 5–8 were all moderate and statistically significant. We observed the largest post-survey average for the Role of SEL in Learning (domain 7). In most cases, teachers already had high agreement with the beliefs in this domain before participating in the course. Overall, we noticed a positive increase in teacher beliefs for all items combined. Our findings are supported by the data collected in year two of the study.

Significance

Discipline is one of the greatest promoters of inequity. We know from research that "students of color and low-income students, who are more likely to experience external stressors outside of school, are less likely than their peers to report high levels of support, safety, and trust in school, and they are more likely to experience punitive disciplinary practices" (The Aspen Institute National Commission on Social, Emotional, and Academic Development, 2019). We also know that "black American students are far more likely to be suspended or expelled and, conditional on an office referral, more likely to receive stiffer punishments. These disparities […] are associated with long-term outcomes, including employment and involvement in the criminal justice system" (Riddle & Sinclair, 2019).

Responsive Classroom courses have the biggest impact on teachers' beliefs about two of the key factors that inform a teacher's approach to discipline: the Goal of Discipline and Goodness of Student Intentions:

- **Goal of Discipline:** Belief that the goal of discipline is to teach students to be in control of themselves and to choose socially and morally responsible behavior because it is the right thing to do, not because of fear of punishment or hope of reward. Belief that teaching students self-discipline and self-control develops goal-setting, problem-solving, and critical thinking skills and helps them to become good citizens who exhibit prosocial behaviors and demonstrate respect for self, others, and property.

- **Goodness of Student Intentions:** Belief that educators should hold and communicate positive beliefs and expectations for all students, including those who may have different values than they do; are culturally, racially, or socioeconomically different from them; who appear disengaged and unmotivated; or who struggle and misbehave. Belief that problem behaviors result from unmet needs or lack of skills rather than the student's character, family background, or intention to do harm.

By matching these changes in beliefs with actionable practices, *Responsive Classroom* courses position educators to become change agents who can address systemic educational disparities and inequities by embracing a nonpunitive approach to discipline and using what they know and believe about their students to inform their approach to discipline.

Recommendations

Educators seeking to bring about systemic school change to address issues of equity would benefit from the use of the *Responsive Classroom* approach (see Table 6) and individuals currently implementing the *Responsive Classroom* approach should pay particular attention to nurturing change in beliefs alongside concrete *Responsive Classroom* practices to create the equitable systemic conditions for social, emotional, and academic learning.

Table 6 – *Responsive Classroom* Core Belief and Guiding Principles

CORE BELIEF

In order to be successful in and out of school, students need to learn a set of social and emotional competencies—cooperation, assertiveness, responsibility, empathy, and self-control—and a set of academic competencies—academic mindset, perseverance, learning strategies, and academic behaviors.

GUIDING PRINCIPLES

1. Teaching social and emotional skills is as important as teaching academic content.

2. How we teach is as important as what we teach.

3. Great cognitive growth occurs through social interaction.

4. How we work together as adults to create a safe, joyful, and inclusive school environment is as important as our individual contribution or competence.

5. What we know and believe about our students—individually, culturally, developmentally—informs our expectations, reactions, and attitudes about those students.

6. Partnering with families—knowing them and valuing their contributions—is as important as knowing the children we teach.

Related Resources

Creating Equity Using *Responsive Classroom*
www.responsiveclassroom.org/wp-content/uploads/2020/07/RC_Creating_Equity-upload.pdf

References

Aspen Institute National Commission on Social, Emotional, and Academic Development. (2019). *From a nation at risk to a nation at hope.* https://nationathope.org/wp-content/uploads/2018_aspen_final-report_full_webversion.pdf

Borg, M. (2001). Key concepts in ELT. Teachers' Beliefs. *ELT Journal, 55*(2), 186–188.

Datnow, A., & Castellano, M. (2000). Teachers' responses to success for all: How beliefs, experiences, and adaptations shape implementation. *American Educational Research Journal, 37*(3), 775–799.

Fives, H., & Gregoire Gill, M. (Eds.). (2014). *Educational Psychology Handbook. International Handbook of Research on Teachers' Beliefs.* Hoboken: Taylor and Francis.

Gerstner, C.-C. E. (2020). *Teacher Belief Survey Results 2019 Study.* Unpublished manuscript.

Mansour, N. (2009). Science teachers' beliefs and practices: Issues, implications and research agenda. *International Journal of Environmental and Science Education, 4*(1), 25–48.

Riddle, T., & Sinclair, S. (2019). Racial disparities in school-based disciplinary actions are associated with county-level rates of racial bias. *Proceedings of the National Academy of Sciences, 116*(17), 8255–8260. https://doi.org/10.1073/pnas.1808307116