



Teaching the Way Students Learn Best

Lessons from Bronxdale High School

Jacqueline Ancess, Bethany Rogers, DeAnna Duncan Grand,
and Linda Darling-Hammond

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Executive Summary

This case study of Bronxdale High School in New York was written to illustrate what a successful school serving diverse learners looks like and does when its practices are consistent with knowledge rooted in the sciences of learning and development.

One of five small high schools in an imposing five-story building in the northeast section of the Bronx, Bronxdale serves 445 students in an inclusion setting. About 26% qualify for special education services—more than twice the norm in most schools—and more than three fourths are identified as economically disadvantaged. More than 90% are students of color. The student population is 57% Latino/a, 29% Black, 8% White, 5% Asian, and 1% Native American.

Most enter the school achieving well below proficiency levels on standardized tests; however, city data show students outperforming their peers and city averages in credit accrual, 4- and 6-year graduation rates, and enrollment in postsecondary education. Bronxdale’s School Quality Review evaluation rated the school as “excellent” in rigorous instruction, teaching and learning effectiveness, teacher collaboration and development, and high expectations for students. Although the proliferation of local gangs makes the neighborhood unsafe, Bronxdale students note that they feel safe in their school. Recently, the New York City Department of Education designated Bronxdale as a model site for restorative practices—a school that other city school leaders visit in order to learn.

This case explores the constellation of factors that have allowed Bronxdale to achieve these successes. Those factors include:

- a compelling vision of students and school as a caring, safe, collaborative community, coupled with structures that build the trust and skills that make this possible;
- the integration of inquiry instruction with social-emotional supports;
- educative discipline that puts restorative practices into action; and
- a faculty and leadership committed to “teaching the way that students learn best,” continuously learning together in a community of practice.

The factors that distinguish Bronxdale are grounded in the science of learning and development that has emerged from neuroscience, cognitive science, and the developmental sciences over the last several decades. As described in several recently published research syntheses, this science supports four principles for educational practice:

1. **A positive school environment that supports student success along the developmental continuum.** Features include school structures and classroom practices that support positive, trusting relationships; attachment and emotional connections; physical and emotional safety, including identity safety; and a sense of belonging and purpose.
2. **Support for the intentional development of social, emotional, and cognitive skills, mindsets, and habits.** These skills include self-regulation, executive function, intrapersonal awareness, and interpersonal skills, as well as a growth mindset and a sense of agency that support resilience and productive action. Supports for behavior should be educative and restorative, enabling students to learn how to collaborate, resolve conflicts, and contribute to the community.

3. **Curricular designs and instructional strategies that support academic capacity, competence, efficacy, motivation, and metacognitive skills.** These designs feature well-scaffolded instruction and ongoing formative assessment that support personalized and collaborative learning, take students’ prior knowledge and experiences into account, and provide the right amount of challenge and support on relevant and engaging learning tasks.
4. **Multi-tiered systems of support based on a shared developmental framework.** These systems provide personalized academic and nonacademic supports that seek to remove obstacles to learning and address the effects of adversity.

In addition to these aspects of school design, supported by Bronxdale’s work with its partner, the Institute for Student Achievement, the school engages teachers in ongoing professional learning in a community of practice that is always evolving new practices to meet students’ needs, informed by student development and what works in schools with similar visions. Key aspects of the school’s practices include the following:

Creating a Positive School Culture and Climate

Bronxdale aims to create a safe, caring, collaborative community in which all community members—staff, students, and families—have voice, agency, and responsibility. This vision sets the foundation for the school’s mission: to develop students as “self-reliant, independent learners,” who are “curious and know how to be thinkers” and are “creative problem-solvers.” This vision, which drives organizational and programmatic decisions and choices, is informed by a deep understanding of how systemic social injustice has affected students. The elements that make this vision come to life include:

- structures such as small class size and advisory to develop close, caring relationships between teachers and students and among students;
- pedagogy based on how Bronxdale students learn best;
- a restorative approach to discipline;
- distributed leadership among staff who have been hired because of their knowledge, skill, and dispositions to support success for all learners;
- intensive ongoing individual, team, and whole-school professional development led by staff and external partners who support Bronxdale’s goals; and
- multi-tiered systems of academic, health, and social supports to address learning barriers in and out of school.

These features contribute to a positive school culture and climate and to teacher and student success.

Teaching of Social and Emotional Skills and Mindsets

Systemic opportunities for teaching social and emotional skills and growth and academic mindsets are integral to Bronxdale’s culture and are woven into the school’s organizational, educational, and social fabric. Staffing and budgetary decisions, such as hiring two restorative deans, a counselor, and two social workers, have brought restorative practices to every facet of school life, emphasizing

learning and self- and community repair over punishment. Mechanisms that amplify student voice, initiative, agency, and responsibility—such as advisory, Peer Group Connections, restorative circles, peer mediation, and youth court—offer a supportive environment in which students can learn multiple strategies for constructively managing their emotions and conflicts in school, as well as in their lives.

Simultaneously, these approaches enable students to take on a variety of peer leadership roles, operationalizing students as supporters and sustainers of the school as a safe, caring community. At Bronxdale, students are not positioned as the problem: They are an active and critical part of the solution. The school also structures teaching and learning so that students share responsibility for designing and enacting norms of individual and interactive behavior. Teachers provide protocols for discussion, collaboration, and sharing feedback for improvement so that students are proactive participants in the classroom, developing each other's knowledge and skills.

These processes are also used as students conduct research on topics of personal passion in their 12th-grade capstone projects, which are supported through processes of revision and presented to a jury of peers and faculty. All of these initiatives give Bronxdale students opportunities to practice academic and emotional self-regulation as a regular part of daily life.

Instruction That Supports the Way Students Learn

PrincipalCarolyn Quintana regularly notes that the goal at Bronxdale is to “teach the way our students learn best.” Rooted in inquiry-based learning, Bronxdale High School is dedicated to fostering a realistic, relevant, and hands-on educational experience for all students. Through collaboration, both in the school and in the surrounding community, students are immersed in an environment that (1) engages inquiry, promotes proactive learning, and cultivates curiosity; and (2) supports student thinking and helps them to communicate with clarity and precision in order to instill an intrinsic desire for lifelong learning.

Teachers employ three key strategies to accomplish these goals: They build community that allows adults and students to know each other well; they design and implement inquiry-based instruction with strong scaffolding and with attention to reducing cognitive load while teaching cognitive strategies; and they incorporate explicit development of social, emotional, and academic skills, habits, and mindsets. These skills and mindsets include the development of executive functioning, as students plan and implement projects, and the development of a growth mindset, as students receive feedback on their work, revise it, and see that their competence grows with effort.

Systems of Support

Bronxdale is sensitive to its students' life contexts and has created systems of support to help students address academic, physical, and mental health needs, as well as adversity conditions that can lead to trauma and toxic stress and undermine learning. These systems of support include a partnership with Bronx Montefiore Medical Center, which offers medical services to students in all the small schools in the large building that houses Bronxdale. Students can gain access to health services, including dental care; vision care with free eyeglasses; health education; reproductive health information in advisory classes; and referrals to individual, group, and family counseling with Montefiore social workers and counselors.

School-based mental health supports include a class on mindfulness as well as intensive interventions through individual and group counseling, which is sometimes organized around common needs, such as grief counseling. To make sure that students feel safe in a neighborhood that can feel unsafe, teachers take positions outside the school at dismissal as signposts of care and safety. Because school holidays can create particular stress for students in extreme poverty, Bronxdale has created a list of places that provide food, activities, heat, books, and computers.

The school also has a well-developed system of educational supports. These supports include well-designed special education services and inclusion classes co-taught by expertly prepared special education and general education teachers. Students also have access to after-school and lunchtime tutoring, Saturday academy, mentoring, a resource room for extra help as needed, and a computer lab for students who do not have access to technology at home.

Professional Learning in a Community of Practice

Bronxdale enables teachers to tailor their pedagogy to how students learn best by creating a community of practice: Faculty come together regularly in different configurations to learn—much in the way that students learn, through inquiry, collaboration, and self-reflection—with students at the center of their inquiry.

This community of practice rests on several significant beliefs about teachers and their learning. First, teachers at Bronxdale are invested with a powerful level of trust to take charge of their own learning and to share their expertise with colleagues. Because faculty members are recognized as empowered agents, teacher learning consists of more than the delivery of professional development; it also involves the active examination of self and practice, connecting that self-knowledge to instructional improvement. Second, faculty learning is enriched because it occurs within a collaborative community made up of peers and external partners. The external partners include the Institute for Student Achievement, which has worked successfully with many New York schools to build student-centered practices over many years. Finally, the process of inquiry in which staff members engage is ongoing: The school and the practices that define it are continually evolving as the collective knowledge of adult stakeholders evolves.

The result is an environment in which student needs are actively examined, and strategies to meet them are continually devised and revised, with continuously improving outcomes as a result.

Introduction

As we enter their crowded, buzzing classroom, Mary Zelenka and Pamela Zaiter are introducing a new challenge to their 9th-grade Algebra students. Their goal is to help students distinguish between situations that can be modeled with linear functions and those that require exponential functions. Their challenge: “Survive a zombie apocalypse.” The students have just received these instructions:

Several hours ago, Mayor de Blasio received a report that an outbreak of a deadly new virus has begun in the Bronx. The virus is known to completely control its victims within an hour of contact and quickly turns every living human into a zombie. Each zombie carries the disease and is then able to infect others nearby. Once a human is infected, they will now infect more people. There are currently 1,471,000 people living in the Bronx. Since there is no escape and currently no antidote, your task is to figure out how long it is possible to survive in the Bronx. [Justify your solution and support your thinking with at least two pieces of mathematical evidence, e.g., a table, graph, equation.]

Sitting in pairs, the students are working together to understand the problem and are taking notes on what they know, what they need to know, and what their next steps will be to solve the problem. “Oohs” and “ughs” can be heard as they exclaim and laugh about the hypothetical, while they jot down notes about how to approach the problem. After giving them time to grapple with the situation on their own, Zelenka guides a lively conversation about what they know and think about the situation, and what else they need to know. Some of the conversation deals with zombies and the Bronx, and whether this is happening in other boroughs, how it got started, etc. Most of it deals with the mathematics needed. Students begin to realize there are other facts they will need to calculate their answer, such as how many zombies there were at the start and how many humans each can infect in a single day. Once they have established the scenario, Zelenka and her co-teacher give each group a different starting value and a different growth factor (some have a constant growth factor and some have a percent growth factor) so they will be able to make comparisons later.

As the class gets to work, the teachers circulate through the class asking leading questions to help students think about their strategy and clarifying aspects of the mathematics that are needed to implement the strategy. The teachers are prepared for possible misconceptions the students may have about linear versus exponential functions and potential trip-ups, such as confusion between initial values and growth rates, so they are alert to those as they circulate, asking students to recall aspects of what they have learned and to focus on particular aspects of the problem. They probe for understanding with a wide range of scaffolding questions:

“Can you explain what you’ve done so far? What else is there to do?”

“Why did you decide to use this method?”

“Can you think of another method that might work?”

“Do you think this is a realistic representation if this were to happen in real life?”

The teams are diligent and engaged. Hands fly up when students are stuck. Often students answer each other’s questions. The teachers encourage them to think about the question from a different angle or by recalling earlier work the students have done, some of which is on the many posters around the room reminding students of different kinds of equations, with graphs, tables, and solution strategies. When enough teams have developed answers, the teachers bring the class

back together to share their solutions. Students use the white board to demonstrate their equations, graphs, and thinking. The teachers ask additional questions to extend the students' thinking, such as:

“What type of function does this represent and why?”

“What effect does the initial value have on your model?”

“What effect does the growth rate have on your model?”

“Is there a more efficient strategy?”

“Does anyone have the same answer but a different way to explain it?”

“Can you convince the rest of us that your answer makes sense?”

“How is the growth of the Zombie Apocalypse similar to or different from the Baffling Bacteria problem we did? How else could you see this problem in real life?”

Some students are satisfied with their answers, while others go back to change aspects of their work as they learn from other teams about how they approached the problem. Some who were stumped are now ready to move forward. Toward the end of the class, the teachers pose a new challenge to extend students' thinking:

“If you were given the choice between more initial zombies but a slower growth rate or fewer initial zombies but a greater growth rate, which would you pick and why?”

This gives rise to a robust conversation that solidifies a key aspect of students' understanding about exponential functions—that the rate of growth is key to how quickly the zombies infect everyone else.

The teachers are planning for more extensions of these ideas in future lessons. One extension asks students to apply their model to the entire population of people in New York City to see how long it would take the entire city to be infected. It then posits that the government has found a cure and asks, “What is the last possible day you feel the cure would do any good?” Another suggests that scientists get busy right away and are able to find a cure for zombiism by the 4th day, but their antidote is successful only 15% of the time. The question is, “How long would it take for scientists to turn all the zombies back into humans? Can this happen? Why or why not?” The teachers will get students to mathematically consider an exponential decay model at this point. Connecting this work to the real world, they will ask students to think about real-world epidemics, like the Ebola or anthrax outbreaks.

A newcomer to this classroom would never guess that more than one third of the students working on this challenging set of problems are identified for special education, or that virtually all of them come from low-income Black and Latino/a households across the Bronx.

Bronxdale High School, a small 9th- through 12th-grade New York City public school, serves what is commonly referred to as an “underserved” population that has generally experienced little academic success.

While such student demographics and ZIP codes are frequently used to explain low expectations, poor student outcomes, high rates of violence, and school cultures of failure, Bronxdale High School represents an exception to these norms. In 2018, Bronxdale's 4- and 6-year graduation rates (82% and 84%, respectively) surpassed graduation rates of its comparison schools as well as its borough

and city high school averages. A higher percentage of the school's 9th- and 10th-grade students earned sufficient credits to be on track for graduation than their comparison group and borough and citywide counterparts.¹ The school's 2017–18 New York City Department of Education (NYC DOE) School Quality Review evaluation rated Bronxdale as “excellent” on rigorous instructions, collaborative teachers, effective school leadership, trust, and strong family–community ties.² Recently, the NYC DOE designated Bronxdale as a model site for restorative practices—a school that other city school leaders visit in order to learn.

How has Bronxdale achieved these successes? This case explores the constellation of key factors that have created a culture that affords Bronxdale its successes as the school has continuously evolved. Those factors include:

- a compelling vision of students and school as a caring, safe, collaborative community, coupled with structures that build the trust and skills that make this possible;
- the integration of inquiry instruction with social-emotional supports;
- educative discipline that puts restorative practices into action; and
- a faculty and leadership committed to “teaching the way that students learn best,” continuously learning together in a community of practice.

As we describe in the next section, Bronxdale has achieved these goals with some struggle. Today, Bronxdale has a safe and caring school culture. Staff have commented:

“If I have a conflict, I approach the student and tell him what I appreciate about him and then what my issue is, and we discuss.”

Comments from students and staff include:

“Here we talk things through.”

“We talk out differences instead of fighting.”

But in 2011, when the school was brand new, this was not the case. As one senior explains, “Students were bad. There were lots of fights. It was unsafe.” In fact, as this student notes, the school spent year one “in disarray.” Teachers struggled to teach in overly long, irregularly scheduled instructional time blocks; students were unfocused; and stories of intra-faculty conflict found their way into the local tabloids.

At the end of the school year, the founding principal was removed and replaced by Carolyn Quintana, the principal at the time of this study. When Quintana, known affectionately as “Q,” became the principal of Bronxdale, she was determined to initiate change. Subsequent to her arrival, many of the original staff left the school. In addition to the school being new, without entrenched habits and personnel, New York City policies—in particular, principal autonomy in hiring staff and budgetary matters—helped Quintana realize her vision.

In the school's second year, she began introducing practices and resources that would fundamentally change the school's culture. These initiatives included peer mediation; restorative circles; restorative deans; Peer Group Connection (PGC) programs; student government in which students can be part of the school's decision-making and development; and youth court, where, according to one student, “you find out the reasons for the problem and try to solve it.” They were designed to fulfill several goals. They were meant to help build the school as a caring community,

create a restorative environment, and address students' social and emotional needs, all as a foundation for engaging students in intellectually challenging academic work that would prepare them for a robust future. Indeed, over the 7 years since it was launched, Bronxdale has evolved into a caring, safe, inquiry-based school community, committed to the success of its diverse students, though the staff and faculty remark that, in the climate of continuous improvement the school fosters, there is still work to do.

This case study describes both the practices in which Bronxdale engages that contribute to its students' success and the journey it took to develop these practices. The study is based on interviews with students and staff; observations of classrooms, faculty meetings, and professional development sessions; and reviews of school and district documents and data. (See Appendix A for study methodology.)

In the remainder of this report, we describe the origins and context of the school, and the ways in which it creates a positive climate, supports instruction, teaches social and emotional skills, enacts restorative practices, and provides additional student supports.

We frame this discussion with a review of recent research from the sciences of learning and development that explain why and how these practices are critically important for productive student engagement and learning, especially for students who experience significant adversity outside of school and are placed furthest from opportunity in the social systems they inhabit. We close with a discussion of professional learning that enables educators to engage in these practices, and with lessons that may be useful to other schools and systems seeking to develop schools that are designed to support how students learn.

Origins and Context

Bronxdale High School, which opened in 2011 at the Bronx's Christopher Columbus High School Campus, is one of New York City's small public high school start-ups created in the wake of a districtwide redesign project that established alternative schools in the 1970s and went to scale in the early 1990s, continuing to the present. The new schools strategy was developed by New York City Schools Chancellor Joe Fernandez in the early 1990s, with many projects funded by the Bill & Melinda Gates and Annenberg Foundations, long before charter schools were authorized. The strategy began to phase out large failing public high schools and replace them with new small public high schools, co-located in the large high school buildings (known as campuses). The new small schools were built one grade at a time, beginning with 9th grade, as the larger host school was phased out. Research has since confirmed stronger graduation rates and achievement outcomes at these smaller high schools compared with the large, anonymous schools they replaced.⁵

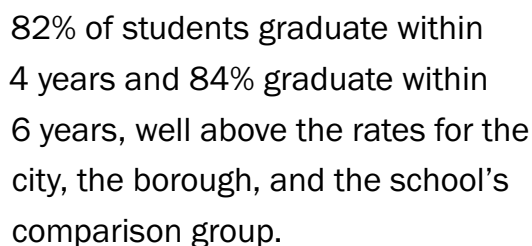
The Columbus Campus is an imposing five-story, red brick building with decorative marble slabs and grand bronze doors, almost 80 years old. Originally built for 4,500 students, it is located in the Allerton neighborhood of the Pelham Parkway northeast section of the Bronx, not far from the Bronx Zoo and New York Botanical Garden. The current five small co-located Columbus Campus schools, with a combined population of about 2,000 students, each occupy a discrete space. Except for one corridor, Bronxdale occupies all classrooms and offices on the first floor and others in the basement. Common spaces shared by all schools include the cafeteria, gym, auditorium, and library.

The neighborhood cityscape features single-family and two-family private homes, mid-20th-century private low- and high-rise apartment buildings with balconies, and public housing projects. Neighborhood residents are predominantly Black and Latino/a, with small, long-standing Italian and immigrant Albanian populations. The school's racial makeup is similar to the community's, with a population that is 57% Latino/a, 29% Black, 8% White, 5% Asian, 1% Pacific Islander, and 1% Native American.⁴ More than three quarters of Bronxdale students (77%) are classified as economically disadvantaged.⁵ Though the proliferation of local gangs makes the neighborhood unsafe, Bronxdale students report that they feel safe in their school.

In 2017–18, Bronxdale served 453 students, 24% of whom qualified for special education services (including eight autistic students) and 8% of whom were classified as Limited English Proficient.⁶ Because New York City has an all-choice system for high school, all middle school and junior high school students complete a high school admissions application on which they choose 12 schools in rank order of preference. The NYC DOE uses an algorithm to match applicants to one of their 12 listed schools. While students from the city can and do apply to Bronxdale, the school gives Bronx applicants admissions preference. Despite the student choice policy, some students are assigned to schools they did not choose (due to the popularity of some schools and exclusion by others that are permitted to screen). Bronxdale, though increasingly popular, nonetheless is assigned some students who have not chosen the school, which poses a challenge in orienting those students to the school culture.

The school's large population of students from low-income families comes to 9th grade with a history of underperformance: Most are achieving well below proficiency levels on standardized tests when they enter⁷. The attendance rate in 2017–18 was 87%, slightly lower than the New York City average of 89%, and 43% of students were identified as chronically absent.⁸ In 2017–18, the NYC DOE designated Bronxdale as a community school. This designation will bring in resources targeted to improving student attendance, which is threatened by neighborhood gangs and a wide array of family and personal challenges students confront.

Despite such factors, annual student data collected by the NYC DOE in 2017–18 show that Bronxdale students outperformed their comparison group, borough, and city high schools on the critical indicators of being on track for graduation as well as 4- and 6-year graduation rates.⁹ For example, 82% of students graduate within 4 years and 84% graduate within 6 years, well above the rates for the city, the borough, and the school's comparison group. (See Table 1.) The 4-year graduation rate includes 100% of those who scored a 3 or 4 on New York's proficiency tests (the top two levels); 84% of those who scored a 2 (below the cut score); and 66% of those who scored a 1 (the lowest score), a stronger graduation rate for these students than for students in the city, borough, or comparison schools.



82% of students graduate within 4 years and 84% graduate within 6 years, well above the rates for the city, the borough, and the school's comparison group.

Table 1
Indicators of School Progress, 2017–18

Indicator	Comparison Group			
	Bronxdale		Borough	City
Earned enough credits in 9th grade to be on track for graduation	94%	80%	80%	85%
Earned enough credits in 10th grade to be on track for graduation	89%	72%	76%	81%
Successfully completed approved college or career preparatory courses and exams	15%	35%	33%	49%
Graduated college ready (met CUNY's standards for avoiding remedial classes)	32%	42%	37%	51%
Graduated within 4 years	82%	75%	69%	76%
Graduated within 6 years	84%	80%	74%	80%
Graduated high school and enrolled in college or other postsecondary program within 6 months	60%	53%	52%	59%

CUNY = City University of New York.

Source: New York City Department of Education. (n.d.). 2017–18 School Quality Snapshot: Bronxdale High School (11X508). <https://tools.nycenet.edu/snapshot/2018/11X508/HS/#SA>.

The school emphasizes project-based learning rather than test prep courses such as the New York Regents and Advanced Placement courses, and thus does not rate highly on the city's measures of college preparation, which rely largely on how many students take these courses and tests. Bronxdale offers the required basic Regents-level courses and then offers more advanced-level non-Regents courses in chemistry, science research, and other areas; these courses are more project- and inquiry-based than the test-based courses. The school's leadership coach, who had served for 7 years at the time of our study, explained that Bronxdale also prioritizes the senior capstone project—a graduation requirement performance assessment much like a college thesis, which builds student agency and students' capacity to produce rigorous work—over enlisting students in more traditional college courses for dual credit (also part of the state index for college readiness). For their capstone, students design a research question in an area of interest or passion, conduct research and write a report, and present their project to their class as well as to a panel of teachers and others at a symposium in the library similar to a poster session at a professional conference.

Postsecondary Enrollment

As noted above, the school focuses more on senior capstone projects for demonstration of learning and mastery than on the Regent’s courses and tests used in New York to assess college readiness. Bronxdale students’ enrollment in college or other postsecondary programs within 6 months of graduation (60%) is noticeably better than that of their borough peers (51%) and their comparison group (52%), and slightly higher than the citywide average (59%), which is composed of fewer economically disadvantaged students.¹⁰

About half of Bronxdale students go on to postsecondary education within 6 months of completing high school. In 2017, about 60% of the college-goers went to 4-year colleges, split between the City University of New York (CUNY) and other New York state public and private colleges.¹¹ Most of the remaining students went to 2-year colleges, primarily in New York City. A few went to postsecondary vocational or trade schools.

School Climate

The school’s report card shows that Bronxdale stakeholders are happy with what is happening at the school. The NYC DOE annually surveys students, teachers, and parents on their perceptions of their school’s instructional rigor, staff collaboration, supportive environment, leadership effectiveness, trust, and strength of community and family ties. Bronxdale’s student and teacher response rates in 2017–18 were higher than the citywide rates, and school respondents’ positive responses far exceeded city high school averages on all of these indicators.¹² (See Table 2.)

Table 2
Results of New York City School Climate Survey, 2017–18

Section	Respondent	% Positive	
		Bronxdale	City Average
RIGOROUS INSTRUCTION			
Common Core shifts in literacy	Teachers	100	93
Common Core shifts in math	Teachers	100	91
Course clarity	Students	81	75
Quality of student discussion	Teachers	79	69
Academic press	Students	74	69
COLLABORATIVE TEACHERS			
Cultural awareness and inclusive classroom instruction	Teachers	99	91
	Students	93	88
	Combined	96	90
Quality of professional development	Teachers	91	75
School commitment	Teachers	98	82
Peer collaboration	Teachers	99	87
Innovation and collective responsibility	Teachers	95	76

Section	Respondent	% Positive	
		Bronxdale	City Average
SUPPORTIVE ENVIRONMENT			
Safety	Students	88	81
Classroom behavior	Students	67	62
Social-emotional	Teachers	97	80
Personal attention and support	Students	74	63
Peer support for academic work	Students	71	65
Guidance	Students	91	83
Preventing bullying	Students	71	70
EFFECTIVE SCHOOL LEADERSHIP			
Inclusive principal leadership	Parents	96	93
Teacher influence	Teachers	99	84
Program coherence	Teachers	97	78
Principal instructional leadership	Teachers	96	83
STRONG FAMILY–COMMUNITY TIES			
Teacher outreach to parents	Parents	92	90
	Teachers	96	85
	Combined	94	88
Parent involvement in school	Parents	81	80
TRUST			
Parent–teacher trust	Parents	96	94
Parent–principal trust	Parents	96	93
Student–teacher trust	Students	89	81
Teacher–principal trust	Teachers	98	82
Teacher–teacher trust	Teachers	97	88

Data source: New York City Department of Education. (2018). *2017–18 school quality guide / HS (online edition)*. New York, NY: Author. https://www.nycenet.edu/OA/SchoolReports/2017-18/School_Quality_Guide_2018_HS_X508.pdf.

The high rates of positive survey responses from students, teachers, and parents regarding trust, respect, family ties, safety, effective leadership, and rigorous instruction are testimony to Bronxdale’s creation of a school culture that effectively addresses both the academic and social-emotional domains of education.

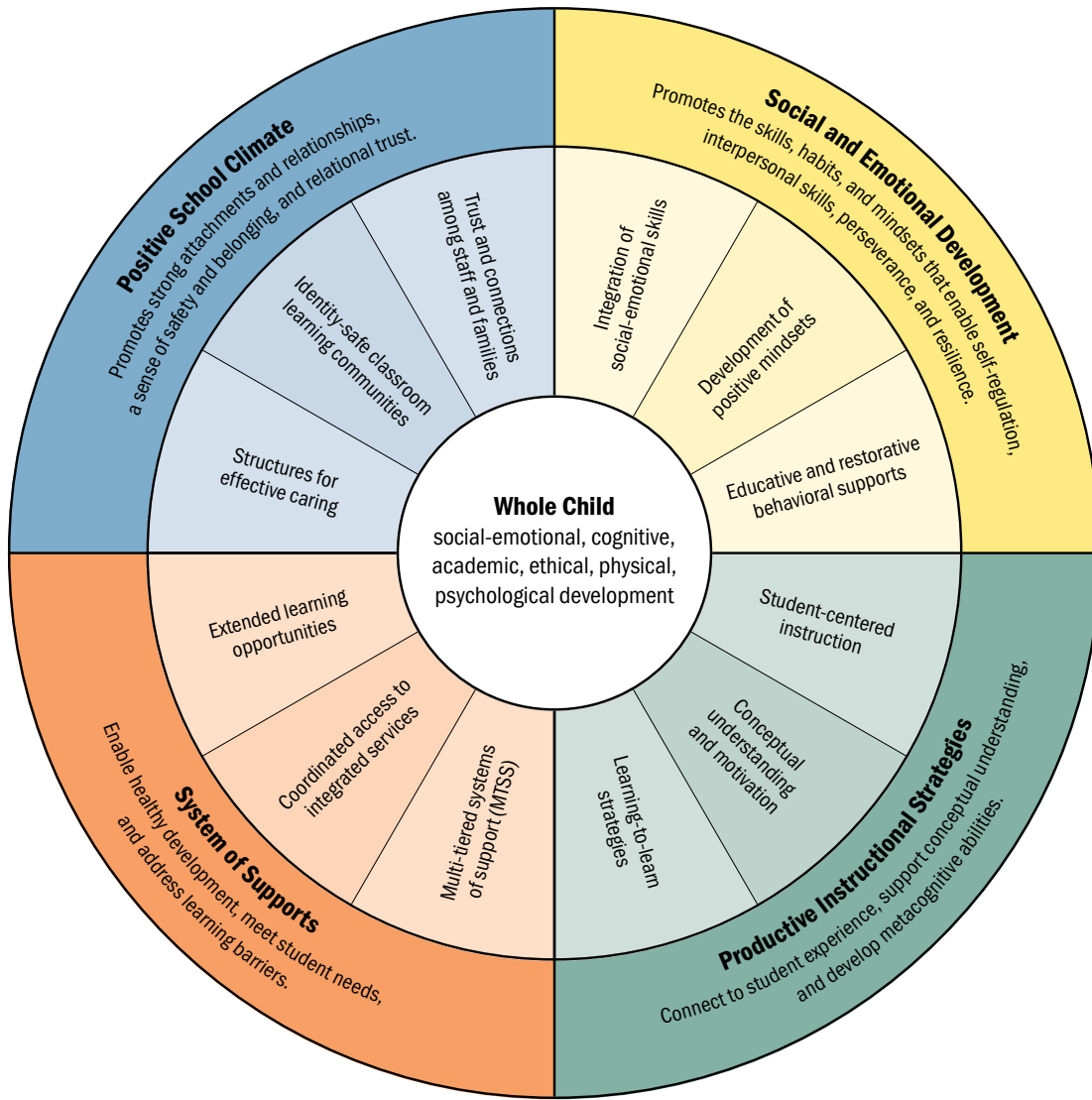
Grounding in the Science of Learning and Development

The factors that distinguish Bronxdale are grounded in the science of learning and development that has emerged from neuroscience, cognitive science, and the developmental sciences over the last several decades. As described in several recently published syntheses,¹³ this science outlines the brain's plasticity, the conditions under which it develops optimally, the effects of toxic stresses and adverse childhood conditions on development, and the ways in which these adverse conditions can be addressed to restore healthy functioning. This science supports several principles for educational practice dealing with the importance of secure relationships in a supportive environment, explicit teaching of social-emotional as well as cognitive skills, productive instructional strategies for meaningful learning, and a system of supports for students who experience adverse conditions or other obstacles to learning. As summarized in a seminal article on the implications of the science for practice, the principles include:

1. **Environmental conditions that support student success along the developmental continuum.** These include school structures and classroom practices that support positive, trusting relationships; attachment and emotional connections; physical and emotional safety, including identity safety; and a sense of belonging and purpose.
2. **Support for the intentional development of social, emotional, and cognitive skills, mindsets, and habits.** These skills include self-regulation, executive function, intrapersonal awareness, and interpersonal skills, as well as a growth mindset and a sense of agency that support resilience and productive action. Supports for behavior should be educative and restorative, enabling students to learn how to collaborate, resolve conflicts, and contribute to the community.
3. **Curricular designs and instructional strategies that support academic capacity, competence, efficacy, motivation, and metacognitive skills.** These designs feature well-scaffolded instruction and ongoing formative assessment that support personalized and collaborative learning, take students' prior knowledge and experiences into account, and provide the right amount of challenge and support on relevant and engaging learning tasks.
4. **Multi-tiered systems of support based on a shared developmental framework.** These systems provide personalized academic and nonacademic supports that address learning needs and the effects of adversity.

As shown in Figure 1 below, these four areas of school and classroom practices are derived from the consensus findings drawn from many disciplines that inform our knowledge of learning and development,¹⁴ and they characterize the practices found at Bronxdale High School. We describe these practices throughout the remainder of this case; a table summarizing the specific Bronxdale practices that map onto these principles can be found in Appendix B.

Figure 1
A Framework for Whole Child Education



Source: Darling-Hammond, L., & Cook-Harvey, C. M. (2018). *Educating the whole child: Improving school climate to support student success*. Palo Alto, CA: Learning Policy Institute.

I. Creating a Positive School Culture and Climate

Schools often approach change initiatives as technical reforms. The reforms often encourage educators to import a program or a set of strategies or tools or a scripted, teacher-proof model that leaves the core culture untouched, which results in transitory or superficial change. Bronxdale’s reforms have worked in the reverse fashion. Change has emerged not from the outside in, but from inside the school, from its cultural core. The initiatives Bronxdale has adopted are aimed not at implementing a technique but at achieving outcomes for students that further positively influence the school’s cultural core. Everything starts and ends with evidence of fidelity to the collective vision for student success rooted in the idea of school as a caring, safe, collaborative community.

The Vision

A conjoined vision of a competent and caring Bronxdale graduate and of Bronxdale High School as a caring, safe, and collaborative community sustains the culture and drives continuous improvement. Bronxdale’s evolution began with and regularly returns to a vision of what the school wants for its students, who it wants them to be, what it wants them to be able do, and what it wants for their future, something that is inexorably bound to the idea of school as a community. Says Principal Quintana,

Our mission is to work together as a community so that kids understand what a community is in order to develop as self-reliant independent learners, who leave curious and know how to be thinkers and can solve problems and be creative. All of this requires seeing how people work together to do this.

The vision for students has been shaped by a profound shared belief in students’ worth and potential, in social justice, and by a powerful understanding of how social *injustice*—poverty; racism; drugs; a gang-infested, predatory neighborhood environment; immigration status; family stress; and marginalization, which Quintana refers to as “being othered”—has affected students. That vision is further informed by stakeholders’ beliefs regarding what education, and Bronxdale in particular, can do to try to right things.

The faculty take collective responsibility as the agent for enacting change to sustain the school as a collaborative, caring, safe community. This mission was vividly apparent in the launch of a 2017 initiative to increase student agency. At a 3-day Summer Institute dedicated to school planning and professional development, the 16-member Bronxdale leadership team, composed of administrators, deans, social workers, counselors, and teacher leaders, began by assessing where they were on their vision journey with three questions:

“What should a Bronxdale graduate look like?”

“What does a Bronxdale graduate look like?”

“What are the gaps between the two?”

Team members’ aspirations for graduates included that they be “woke, analytical self-advocates”; have “a growth mindset, skills for deeper learning, ability to do research”; and possess an “understanding that they are part of a larger community.”

They concurred that, currently, Bronxdale graduates demonstrate “great potential, curiosity, cleverness, and [are] community oriented” but also deal with “learned helplessness and [being] opinionated, unsure, uncertain, unaware of the broader world, unable to take tests, and possessing a fixed mindset.” Although one might wonder why the faculty is still raising these questions 7 years into the school’s existence, Quintana says, “This is an exercise we engage in every year. It helps to remind us where we are and where we are headed.” And the gaps, as one staff member noted, remind them that work remains to be done.

Where Bronxdale is headed, in this case toward the development of student agency, will be informed by *how* they are headed there, as a collaborative community. The collaborative community comes together in the leadership team, first at the Summer Institute and then for the entire staff at the professional development day prior to the September opening of the school year. Both groups engage in an inquiry to build knowledge and understanding of agency that will enable them to come to a common vision of what they mean by agency, how it connects to their individual and collective vision of a Bronxdale graduate, what agency looks like in operation, what roles different staff will play to support greater student agency, what the implementation timeline will be, and what some high-leverage classroom strategies might look like. In other words, they start with the co-constructed vision and then collaborate to operationalize it.

Two months later, at that opening professional development day, with the entire staff (about 40 people) assembled at tables in the Columbus Campus library, Quintana launched the conversation once again with the staff’s vision for a Bronxdale graduate: “Communicative, resilient, [having] literacy in every capacity, world literate—knowing issues, confidence, [having] a plan, empowered, ambitious, self-reflective, critical thinker, community oriented, able to manage emotions, socially aware, flexible, goal oriented, risk taker.” She synthesized the main point: “All [these qualities] that you shared have to do with pieces that do not have to do with content.” She expanded, “Skills that kids need overlap: personal, interpersonal, academic. Be good at relationships; be good at skills. Academic skills help [students] to become better professionals.”

Quintana then engaged the gathered staff in a collective inquiry about how their practice connects to their vision, asking what they were doing to implement their vision of what is important for students to achieve. She asked:

How do you ensure that your content area is about the research skills and the purpose of their being in school in the first place, so that the purpose moves beyond the classroom, so that you are helping them to become the kids that you have described as a Bronxdale graduate? What is one practice you can do, have done, will do to help students achieve the items on your list? What is it that you do?

These questions, asking staff to make public the alignment between their vision and practice, guided the table discussions. They moved on to reading and discussing articles about agency, building new knowledge to inform their definition of agency, which they concurred means “responsibility to take action,” something teachers do to “foster growth in students, not something they do to them,” “part of the school culture—part of schoolwide practice.”

With these deeper understandings, the staff connect the current state of agency at Bronxdale to existing practice, mechanisms, and opportunities, so they are not layering on but rather building out from the inner core. They start with the existing opportunities for student voice, such as the

capstone project, in which students select a question of interest or passion to research and become an expert in. Staff members make reference to inquiry pedagogy, which enables students to learn to question as teachers give feedback and “kids say, ‘This is how I learn best.’” Staff members also refer to their use of multiple forms of assessment that allow students to show what they know in different ways, as well as strategies that make sure that students know why they are doing what they are doing in their classes.

Teachers acknowledge that many of these strategies that already provide opportunities for student voice are unevenly practiced across the school. This helps remind them that their work in teams is intended to help them learn from each other and to build common practices to achieve school goals—in particular, equal access to opportunities to learn. For example, adopting the use of instructional targets across classrooms has enabled students to know why they are doing what they are doing in any given lesson.

Teachers can use their team structure to increase their capacity to support the development of agency. They explore existing but underused opportunities for the development of agency, such as “opportunities for self-advocacy in self-grading and meeting with teachers,” “revisions,” “finding mastery in their own work,” and “student–peer review.” An assistant principal suggests analyzing the relationship between data and agency in preparation for the coming year’s NYC DOE School Quality Review. Staff raise conundrums of practice in areas where students need further development if increased agency is to occur:

“We need to figure out how to get students to be more independent.”

“Give students safe space for their voice and opinion and [ensure] that [this space] is relevant to what they are doing.”

“A lot of our students do not know what analysis is—we need to model analysis more.”

Quintana reminds them of the routine dailiness required for success in their efforts—“This is about our everyday work”—but also that they are not alone in this endeavor: “Teams will build practice together. Some people are already doing this. [There is] not just one route. There are different ways to get there. Building this into your classrooms is what we will work on.” They will move forward as a community.

Fashioning School to Be a Caring, Safe, Collaborative Community

Bronxdale intentionally structures the regularities of schooling, such as scheduling, discipline, teacher organization, faculty roles and expectations, professional development, and parent involvement, so that they serve the school’s intention to be a caring, safe, collaborative community that will work for its particular students.

Organizing Bronxdale for Community

Decisions about how a school is organized administratively and instructionally—that is, decisions about scheduling, curriculum, instruction, hiring and staffing, responsiveness to student interests—impact the development of relationships and their key corollary, trust. And trust, asserts Quintana, is the foundation for community.

Small class sizes. The school is committed to small size classes; as the 2018–19 Comprehensive Educational Plan (CEP) explains, small class size creates more opportunities for teacher support to students, particularly English language learners.¹⁵ As a result, from grade 9 to 12, Bronxdale class sizes are approximately 22 students per academic course. As of 2018, core courses are 46 minutes long so that the school can accommodate a rich program of electives, some of which are specific to Bronxdale and others of which are campuswide and include students from the schools co-located in the same building.¹⁶ Bronxdale has an extended school day to provide structured time, individual attention, and other supports students may need to succeed in addition to sports and other clubs.

Advisory. To strengthen students’ relationships with adults and with each other, all Bronxdale students have an advisor and advisory class two or three times a week; most teachers facilitate an advisory as the advisor. One of the school’s social workers, Mwaniki Mwangi, explained that the activities in advisory represent four pillars: social and emotional learning, academics, college and career readiness, and community building. Advisors support students’ learning, planning, and engagement in these areas and serve as the adult link to their families for information, support, and problem-solving of all kinds. A teacher who is an advisor elaborated on the nature of the advisor–student relationship: “[Students] build a relationship with that teacher who is the advisor. The advisor is the go-between regarding problems in and out of the building.”

Restorative deans Jessica Flores and Fernando Restrepo point out that advisory builds relationships between students and the advisor and between the advisor and families, making it an essential building block and sustaining force of the school as a caring community. Guidance counselor Nick Boyiatzis commented, “Advisory is where the safe, supportive culture starts and then spreads through the whole school, where students directly air their concerns.” Mwangi and Boyiatzis elaborated on advisory as a “culture builder” that contrasts with a menacing and sometimes predatory neighborhood culture. Mwangi explained, “Advisory is [the] place where the support starts—where the circle starts. Students deal with all that external stuff.” Boyiatzis continued, “We want to make the culture in here better than out there.” Culture building also contributes to academic success.

Marlene Baxter, the school’s community associate, explained that the comfortable environment created by teachers enables students “to feel they can be honest, that this is a space where students can be real.” Students validate these assertions about the affirming and secure nature of advisory, describing it as:

“An important place where we talk about reality, like police brutality.”

“A place to express myself.”

“A way to get to know people around you.”

As one student commented, advisory “is also about preparing for a quiz and reviewing grades.” By building a safe and positive school community, advisors are central to students’ development and internalization of Bronxdale’s culture.

Teaching teams. Staff work in community groups to develop shared norms and practices. Teachers are organized into both department and interdisciplinary grade-level teams, so that a cohort of interdisciplinary teachers (English, math, science, and social studies) teaches the same cohort of students. The grade-level teams develop social bonds that build trust and form a safety net

of support and personalization to protect against isolation for both students and teachers. At regularly scheduled grade-level team meetings, teachers engage in “kid talk” to address individual student problems and use one another’s pedagogical expertise or relationships with students to develop solutions. Students know that their teachers regularly meet and talk about them, and secretly delight in that sense of importance. Teams collaboratively plan activities that implement schoolwide initiatives as well as share effective practices. Department teams can address academic issues, share effective pedagogy, and discuss curriculum and instructional coherence with school goals.

Relationship building. Teachers aim to build trusting student–adult relationships. Quintana explains:

We ask teachers to greet students, ask about their lives, go to their games. Teachers get personally involved in students’ lives—intervening when kids get into trouble, connecting to parents, providing advice as well as supplies—but discreetly, so students save face. This builds relationships, and that is how they trust more.

Mwangi confirms the school’s expectation for staff to be a presence in the school community. He explains that staff members are “in hallways, cafeteria, building trust, setting an example for other staff, going outside the building at end of day to say goodbye to kids—seeing that outside is safe.”

Attention to student voice and needs. Community building is informed by how classes are set up, who gets hired as staff, expectations for teachers’ roles and responsibilities, the types of discussions and questions staff ask, the ability of students to generate questions, the willingness to allow for responses to happen, and the honoring of what students contribute: revising curriculum to make it more relevant to students; students researching topics that are their own; and scheduling clubs during lunch so that everyone can participate and be with friends, as some students cannot stay after school. Students comment that they can suggest and start clubs because, according to one student, the principal “wants to please them.” Decisions about organization can encourage or discourage students to be invested in their work. Quintana emphasizes that they need to be invested in their work, especially to build agency “so that they leave able to speak up for themselves and advocate for themselves, know how to contribute to the community and specifically how they contribute to community and impact the community—knowing that [they will] always [be] negotiating with people.”

This emphasis can be seen in student-made posters that are hung in the hallways, as well as messages from teachers and students in classrooms. There are messages for clubs, such as the Hydro Gardening club and the Mindfulness group. There are bulletin boards devoted to a conflict resolution protocol and to Autism Awareness Month, which are clearly aimed at students understanding how to get along more productively with each other.

Outreach to families. Several initiatives are aimed at students’ families, with the goal of engendering a sense of belonging within the Bronxdale community. Bronxdale’s spring letter to the families of incoming 9th-graders alerts them to forthcoming communication from the Bronxdale Parents Association. This, in turn, offers information about support and mentoring available to new families as well as the school’s online portal, which gives families regular access to their child’s grades and attendance, plus the ability to communicate with teachers. Baxter said, “We do a lot of

parent communication—school outreach. We call them. I can leave a voice message, send home and mail letters.” Bronxdale hosts community outreach fairs at which the school provides resources for parents. According to Baxter, most parents are receptive to the school because they believe that the school cares. She explains, “We work on a personal level. Parents hear from us not just about disciplinary issues.”

Parent meet-and-greet nights, along with traditions such as family dinners, draw parents into the school community and generate feelings of belonging. The school sponsors two family dinners a year, for which students choreograph a dance show, exhibit art, and facilitate family and student small-group discussions on tough topics such as “What bugs you?” Students in Bronxdale’s Culinary Arts Program plan the menu and volunteer to serve. Quintana says:

Parent meet-and-greet nights, along with traditions such as family dinners, draw parents into the school community and generate feelings of belonging.

This is a celebration of students and a breaking of bread together. We have lip sync battles—we put on music and kids and teachers lip sync. They practice routines. It is a competition with costumes. We use fog machines. This brings a community together: At the talent show, the crowd sings and dances along. Regardless of [the] talent of performers, people support each other. Last year two students with autism performed.

Another tradition is the peace rally, which involves families and students from the other schools on the campus. Quintana explains:

There are spoken-word performers, workshops on the arts, rappers, and films to show how we can live together. It is a schoolwide [campus] event about peace—not about addressing harm or a content area, but about community.

Outreach to community organizations. Developing a school–neighborhood community relationship is another aspect of Bronxdale’s community building. The staff has consciously determined that all stakeholders have a role to play in the school’s development and in each student’s success, and so have partnered with a variety of community-based and cultural organizations, including Global Kids, My Brother’s Keeper, Opening Act, Discover Outdoors, Lincoln Center, Tribeca Film Institute, New York Sun Works, The Nature Conservancy, the Center for Supportive Schools, and the Center for Court Innovation.¹⁷ These organizations engage with the school through curriculum development, teacher development opportunities, after-school offerings, and student fieldwork activities that can support students’ capstone projects. Bronxdale also partners with organizations for school, academic, and social-emotional development, such as the Institute for Student Achievement,¹⁸ described below.

Enabling Bronxdale’s Evolution as a Strong Community

Two forces in particular have had a strong influence on Bronxdale’s capacity to work as an effective community on behalf of its students: the school’s foundational partnership with the Institute for Student Achievement and the leadership of Principal Quintana.

Influence of the Institute for Student Achievement

The founding partner of Bronxdale, the Institute for Student Achievement (ISA) is a national nonprofit high school redesign organization that partners with high-poverty, high-minority high schools to build their capacity to graduate their students college-ready. Such partnerships with external school support organizations composed a core feature of the New York City small high schools reform strategy that began in the early 1990s, funded by the Bill & Melinda Gates Foundation and the Annenberg Foundation, which awarded grants to external intermediary organizations as part of their nationwide initiative to create and support small schools. As a recipient of a Gates small schools grant, ISA collaborated with the NYC DOE to start Bronxdale, using the organization’s seven research-based principles¹⁹ as a framework to design the school:

1. **An inquiry-based approach to a college preparatory curriculum**, implemented through an organizational and instructional infrastructure for student support, development of habits of mind and habits of work, integration of literacy and numeracy across the curriculum, multiple forms of assessment, and internships and community service;
2. **Dedicated interdisciplinary grade-level teams of teachers** who teach the same cohort of students, augmented by a team-assigned counselor;
3. **Continuous professional development** that includes individual and team coaching and ISA-sponsored institutes for cross-school professional learning;
4. **Distributed Counseling**, whereby all faculty are responsible for the academic, social, and emotional development of students and the school has a structure such as advisory program that provides each student and their family with a school adult advocate;
5. **Extended school day and school year** to provide additional time to support struggling students as well as opportunities for external learning for all students;
6. **Parent involvement** in school activities; the open exchange of information between parents, teachers, and counselors; and parental feedback regarding their children’s experience and progress; and
7. **Continuous organizational improvement**, including structures, processes, and data use that engage the school in continuous learning and improvement.

ISA collaborates with school leaders and staff to customize the implementation of these principles to fit the particular vision, values, needs, and context of each partner school, primarily through the support of an ISA coaching team, which includes a leadership-school development coach and content area coaches in literacy, English language arts, math, science, and social studies. The coaching team collaborates with the school leadership, counselors, and content area teachers (individually and in content area and interdisciplinary grade-level teams) to develop and implement the various components of the ISA framework. Such components include an inquiry-based, college preparatory instructional program; college knowledge–building experiences; a culture of continuous organizational improvement; and structures and mechanisms that operationalize Distributed Counseling and personalization. More specifically, ISA content area coaches work with

teachers on outcomes jointly determined by coaches, teachers, and the principal and connected to school goals, such as deeper learning or the integration of academic growth mindset and metacognitive strategies into the disciplines.

ISA's support for Distributed Counseling has represented an important strategy for realizing the vision of the caring, safe, collaborative community to which the school aspires. By adopting the idea of Distributed Counseling, everyone in the school takes collective responsibility for students' academic, social, and emotional development and well-being, rather than compartmentalizing this responsibility to guidance departments, as occurs in bureaucratically organized schools.

Working with their ISA coaches to enact Distributed Counseling, schools create and sustain close, caring staff–student relationships. Such relationships, in turn, are leveraged to promote pro-social and pro-academic behaviors and culture. The pro-social aspect of the culture is defined by the value and activity of caring, helpfulness, and compassion; the pro-academic aspect of the culture reflects one in which school adults believe that students are capable and worthy of an intellectually challenging instructional program. School adults are therefore committed to providing the academic, social, and emotional supports students need to achieve academically and graduate prepared for postsecondary education.

School adults are committed to providing the academic, social, and emotional supports students need to achieve academically and graduate prepared for postsecondary education.

Influence of the principal and staff

The principal's role—including the particular strengths of Carolyne Quintana—has been central to shaping and realizing the school's vision for community. Social worker Mwangi pointed out that Quintana's vision for students' experience at the school is not only for them to feel respected and supported, but to feel loved. The love is integral to student success in academics. He commented, "Part of the love is to have the academics be good." Quintana has budgeted for professional development in advisory, race relations, restorative practices, and coaching for inquiry instruction, and she has provided release time for teachers to plan with their coaches. Community Associate Marlene Baxter suggested that:

All of us being able to work together like this starts at the top. Our principal wants to be part of the community. We want students to succeed in the future. She sets that tone and it trickles down, and that makes it easy for us to work together as a community. It doesn't necessarily fall under your job category to all work together.

What also starts at the top is Quintana's belief that if students are to feel cared for by staff, the staff, too, has to feel cared for. Quintana demonstrates her caring in multiple ways, personally checking in with individual faculty members about personal issues as well as their work challenges. The professional development opportunities and resources that Quintana makes available, along with the time and structures for peer collaboration that are built into the school schedule, all send the message that job satisfaction, as well as job performance, matters. The school must be a caring, collaborative community for adults as well as for students.

Quintana is also careful to hire teachers whose values are compatible with those of the school, so that they are predisposed to support the Bronxdale culture. In New York City, principals have the autonomy to hire teachers, and Bronxdale’s ISA leadership-school development coach remarked that Quintana “has a talent for attracting and selecting staff that can enact the school mission.” She invites teachers to join her in interviewing new prospects and considers their feedback in her decisions. As the school has developed its reputation and has become a site for student teachers, those teachers seeking a school with Bronxdale’s culture submit applications to work there.

II. Teaching Social and Emotional Skills and Mindsets

Bronxdale has developed a wide range of strategies to teach explicitly the social, emotional, and cognitive skills, habits, and mindsets that students need to succeed in school and in life, as well as to deal with the trauma that many of them experience as a result of poverty, food and housing insecurity, and violence in their communities. Substantial evidence shows that such explicit teaching enables academic progress as well as the development of productive behaviors for school and life.²⁰ Such learning can be developed in several ways, all of which are present at Bronxdale:

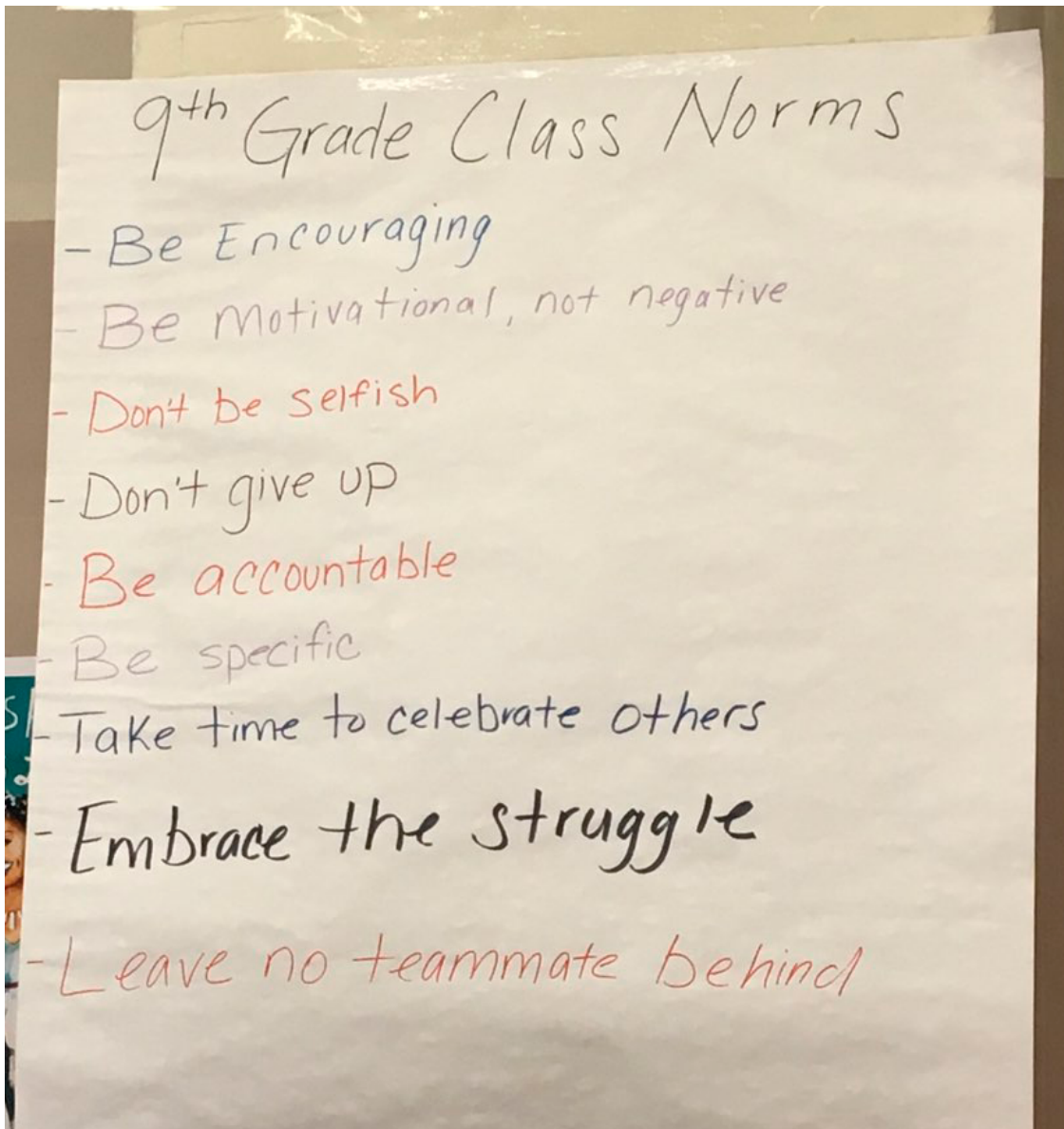
- explicit instruction in social, emotional, and cognitive skills, such as intrapersonal awareness, interpersonal skills, conflict resolution, and decision-making that considers the impact of behavior on the community;
- infusion of opportunities to learn and use social-emotional skills, habits, and mindsets throughout all aspects of the school’s work in and outside of the classroom; and
- educative and restorative approaches to classroom management and discipline, so that children take responsibility for themselves and their community.

Supports for Social and Emotional Learning

In addition to constructing a positive climate and structures that strengthen relationships, the school uses both advisory classes and content classes to provide supports for reflecting on, articulating, and managing emotions; learning interpersonal cooperation and conflict resolution skills; developing executive function and habits of planning, organizing, and making decisions; developing a growth mindset; and feeling a sense of belonging, purpose, and responsibility. All of this occurs through regular opportunities for students to learn and practice these desired qualities rather than by layering on, or “implementing,” an extra program. In this way, instruction at Bronxdale represents a whole that is greater than the sum of its parts.

Reflecting how students engage in discussions about their intra- and interpersonal goals, nearly all classrooms include statements of student-developed norms, typically scribed in student handwriting, as students discussed and wrote them. (See Figure 2.)

Figure 2
Student-Developed Norms



Every classroom displays these norms along with student work, sending the message that what students know and do is the center of the school's focus. One classroom features a bulletin board labeled "Affirmation Station," with sticky notes from teachers conveying messages such as "Thanks for your leadership," "Way to go for the challenge," "Thanks for sharing," "Great use of evidence," "Nuanced point," and "I believe in you." (See Figure 3.)

Figure 3
Classroom Affirmation Bulletin Boards



And in every hallway, there are affirming, encouraging statements such as the following, typically on handmade posters:

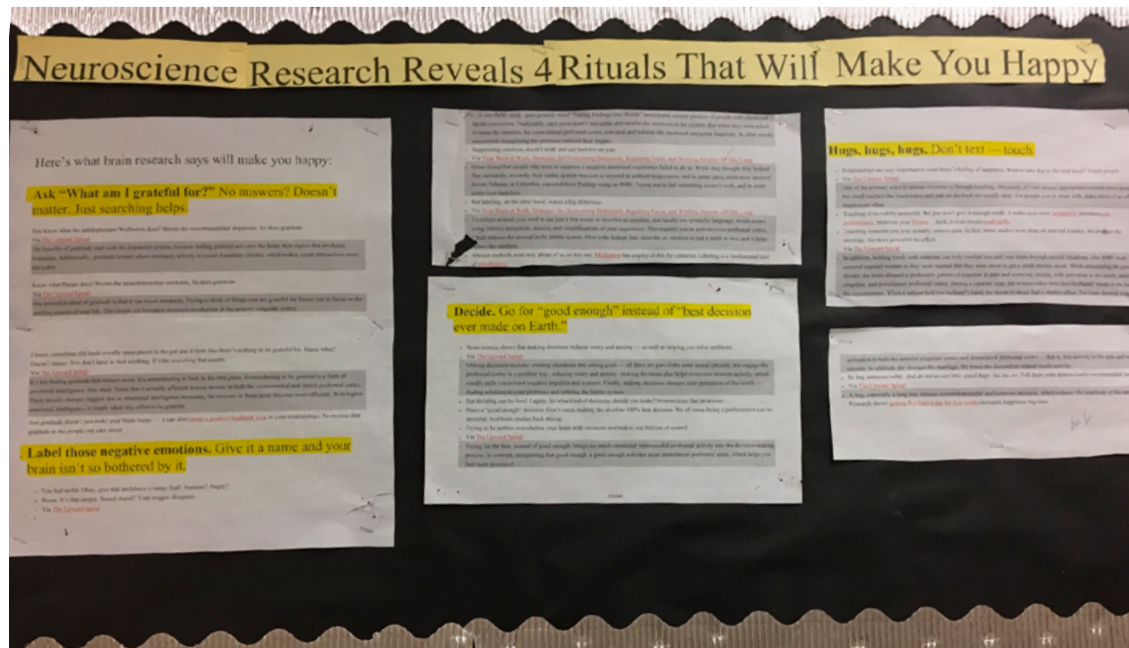
- “Success is not final. Failure is not fatal.”
- “Be Inspired.”
- “Believe in yourself!”
- “Some people dream of success while others wake up and work hard for it.”
- “When it rains, look for rainbows. When it’s dark, look for stars.”
- “You can do it. I won’t give up on you. What we are doing is important.”

These are more than slogans. As we describe in this section and the next, teachers have well-developed strategies for enabling students to revise their work so that they can and do see that they improve with effort; to be graded on the final learning, not the bumps along the way; and to receive academic and nonacademic supports as needed.

The school also explicitly teaches students strategies that can support them in coping, persevering, and treating themselves and each other well. One artifact of this work is displayed on a hallway bulletin board titled “Neuroscience Research Reveals 4 Rituals That Will Make You Happy.” (See Figure 4.)

The school explicitly teaches students strategies that can support them in coping, persevering, and treating themselves and each other well.

Figure 4
Neuroscience Research Report Posted in School Hallway



It lays out several home-crafted, but well-referenced, pages from a research synthesis that highlights the following lessons:

- **Ask “What am I grateful for?”** The text describes how the dopamine system and serotonin are activated by gratitude and how searching for things to be grateful for affects density in the prefrontal cortex, strengthening the capacity for emotional intelligence.
- **Label those negative emotions.** Give it a name and your brain isn’t so bothered by it. The text cites studies showing how naming and recognizing emotions reduces the arousal in the limbic system and reduces negative feelings.

- **Decide.** Go for “good enough” instead of “best decision ever made on Earth.” The text describes how creating intentions and setting goals engages the prefrontal cortex in a positive way, reducing anxiety and worry, especially when focusing on a “good enough” decision rather than the “best” decision supports a sense of control rather than a sense of being overwhelmed by emotions.
- **Hugs, hugs, hugs.** Don’t text—touch. The text describes how hugging and touching increase oxytocin and reduce worry and fear in the amygdala, citing studies that have measured brain activity under different conditions of touching, including one recommending five hugs a day!

In classrooms, these kinds of lessons are reinforced as teachers frequently reteach and praise students for exhibiting these skills, reminding students of those strategies that will help them see themselves as strong learners as well as help them learn. They also exhibit warm, demanding behavior that expresses confidence in students’ abilities to step up to intellectual demands while supporting them in doing so.

The school acknowledges conventional ideals of academic success for its students, such as earning sufficient credits to be on track for graduation, developing critical thinking skills and habits of work required for postsecondary success in college and/or career, and using intellectual efforts to practice skills that will be useful in the real world. But the school’s vision suggests that the acquisition of these traditionally academic goals depends upon developing a host of discrete habits, behaviors, skills, and understandings, many of which extend beyond the “academic” to include tools for building confidence, relationships, and community.

These include students learning relationship skills; practicing how to receive and give feedback in ways that are accountable; becoming acclimated to taking intellectual risks; and developing the capacity to drive their own learning, to assess their strengths and weaknesses, and to develop their own voice and agency. As students buy into shared values that bind them into a community and build social capital that helps them to think about their choices in new ways, they also develop what some call “noncognitive” or “co-cognitive” skills associated with social-emotional learning—self-regulation, executive function, emotional awareness, self-awareness, and cooperation—and are supported in cultivating a growth mindset that promotes the persistence and resilience needed for successful independent learning.

While progress toward such outcomes is certainly buoyed by the larger culture, student development toward those ends is deftly interwoven into the content and pedagogy of formal content classes. In section III, we discuss more fully the ways in which teachers integrate social-emotional skills and habits into their academic teaching. In the remainder of this section, we focus on the school’s approach to teaching and socializing these skills directly.

Educative and Restorative Support for Behavior

A key foundation for social and emotional development throughout the school is Bronxdale’s restorative approach to discipline, which provides the infrastructure for the school’s caring, safe, collaborative community. At Bronxdale, the restorative approach is not a behavior management system to keep the school and students under control, although it does have the effect of creating a safe, respectful environment. Rather, it is a student development strategy that helps students develop pro-social ways of responding to the stresses and tensions that affect them in their daily

lives and that will serve them well in forging successful, productive, and satisfying lives going forward. In that sense, the approach is both educative (focused on creating positive norms and teaching useful strategies) and restorative (able to help repair problems or harms). As one of the restorative deans, Restrepo, put it, the school's goal is "getting students not to respond to their tensions in a violent way anywhere." A student explained that at Bronxdale, "You get a chance to fix what you did. They don't suspend you." Another remarked, "Here we learn about consequences. In other schools, we would get punished for everything."

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Community building is integral to Bronxdale's concept of the restorative approach. Quintana explains that restorative practices have value only when there is something to restore. "That something," she says, is "the community, relationships, and harmony." As one student commented, "We're connected. Students and teachers care about you." Still another stated, "Every student in this school has at least one relationship with a teacher." Restorative practices aim to establish and sustain relationships, harmony, and that sense of community that is a precursor to community members' understanding that violating community norms harms *their* community. Staff want students to understand the importance of taking conscious action to repair the harm done in order to restore the community's integrity, harmony, and relationships, as well as their membership in it. Punitive approaches might generate individual remorse for harm done, but punishment does not teach students the value of community and community membership or the consequences of community lost. This is why Quintana advises other principals who ask about restorative programs for their schools to start not by importing a program, but by building a community, after which a variety of programs can be helpful.

The school has focused both on building community and putting in place a number of supports needed for a wraparound approach. Social worker Mwangi commented that Quintana "is willing to be transparent about the social and emotional community.... [She] is intentional about the resources she puts in the school [and] was willing to put resources in the school that would lead to the changes she wanted to see." Because New York City principals have budgetary and staffing autonomy, Quintana has been able to use funds for professional development and for positions that might not turn up in a typical school's allocation of resources, such as two social workers and two restorative deans. Both deans have deep knowledge and experience in restorative approaches and reject the conventional punitive discipline approach to the role of the dean, underscoring the importance of the principal's autonomy in achieving the desired school community.

At the core of Bronxdale's conception of the restorative approach are the staff's positive beliefs about and their faith in the fundamental worthiness of students. This sentiment is crystallized by deans Flores and Restrepo, who express the view that, although kids sometimes have problems, they are not themselves the problem. They explain that their goal is to help staff shift to the idea that

“kids do what they can. If they can’t, it’s because they don’t know how.” The deans reject the idea that the students are defective and in need of character fixing or punishment; instead they assert the belief that creating school as a caring community can, itself, elicit more pro-social behaviors from students. By helping students understand that they have choices in their responses and can think in new ways, which will give them choices, the staff supports students in imagining, learning, and adopting such behaviors.

Restrepo comments, “SST [Student Support Team] language is careful to not criminalize a child when reporting an incident, and the goal is to train the student’s advisor and teachers that this was not a career choice.” Mwangi confirms that students “are not treated badly after they do something bad.” The restorative approach, he believes, promotes “accountability, self-awareness, understanding, and listening” and intends “that we as adults try to understand the choices students made so that we can help them make choices that are better for them.” These choices also turn out to be better for the school.

Bronxdale’s theory of action is guided by the assumption that students’ behavior is a knowledge and capacity issue on their part rather than a character deficit. Thus, helping student and staff learn to change the environment by remaking the school into a caring community should elicit different student and teacher behavior and allow more productive behaviors to emerge. Students report that they think more about their behavior because they are more aware of its effects, which deters negative acting out.

Accordingly, the school’s approach to most infractions takes a nonpunitive perspective that aims to repair harm. “We rarely go into suspension as a measure of control,” says Flores. “Our goal is not to have [students] leave the building unless we have to—DOE policy—or [because of] something egregious. We tell parents and kids this, and kids know. Our policy is to attempt restorative practices repeatedly, before we suspend. If there is a situation between students, 99% of the time we push for mediation and restorative conference—mediated by student leaders and guided by us or facilitated by us and, always, the advisor.” The renunciation of punitive approaches in favor of consequences enacted through restorative mechanisms helps students understand (as expressed earlier) that there are consequences to their actions beyond themselves that affect other individuals and the environment they care about. For young people living in a neighborhood in which they feel unsafe, discovering that there can be environments that are safe and caring and worth protecting can be a transformative experience.

Operationalizing Bronxdale’s Educative and Restorative Approach

Bronxdale’s restorative approach has been transformative because it operationalizes the staff’s core commitment to create a caring environment in which Bronxdale students can feel that they are trusted community members.²¹ The following sections discuss staffing decisions, structures, mechanisms, and practices that operationalize restorative approaches in the school culture.

Staffing for educative and restorative practices

Bronxdale devotes considerable resources—five full-time positions—to social and emotional supports: two restorative deans, one counselor, and two social workers. This allocation of school budget for these positions is at the discretion of the principal, as in the NYC DOE, principals have budgetary autonomy. Funding for these positions is part of the school’s regular budget and

is not supported by additional dollars. These personnel are dedicated to addressing the school community's capacity to be responsive to students' social and emotional needs; they are ultimately responsible for helping to develop and support the structures, mechanisms, and practices that enact the school's restorative approach.

Restorative deans. Bronxdale's two restorative deans, Jessica Flores and Fernando Restrepo, both of whom have deep knowledge, expertise, and experience in this approach, commented that they would only be deans in an environment committed to a restorative approach. They explained that there are two tiers to Bronxdale's restorative approach. Tier 1 is proactive culture building, restorative practices, communicating with and training adults, and looking at the bigger picture. Tier 2 is the set of restorative practices that respond to harm. The deans work closely together and are involved in implementing both tiers.

Flores and Restrepo are members of the Student Support Team (SST), where they join the two social workers, school counselor, and one of the two assistant principals, Michael Dugan, to proactively identify the resources and supports required for students and staff to be successful. They also devise strategies for addressing challenges and problems that emerge, with the intent of enabling the school to sustain its culture as a caring community and preventing or mitigating further harm. They provide professional development and coaching for the staff on collaborative problem-solving, restorative circles, and other restorative practices. These approaches aim to shift the conventional paradigm of working with students who *are* problems to working with students who *have* problems.

Flores and Restrepo provide professional development that is both formal, through faculty workshops on particular techniques, and informal, through one-on-one conversations with teachers on how to build a strong rapport with students or mediate student-teacher conflicts. They observe classes and provide feedback to teachers on strategies for addressing student behavior. Additionally, they may meet with grade-level teams when needed. When an incident occurs, they will coordinate with a community member (e.g., community police officer or representative from a community-based organization) and parents to explain what has happened; find space for students to de-escalate; notify advisors; and communicate with the SST, administration, and other co-located schools, if necessary. They are also the first responders to an informal "early warning system" that has been set up so students can write anonymously to them about other students causing problems.

Guidance counselor. In addition to programming, scheduling, and student recruitment at middle schools and high school fairs, the guidance counselor, Nick Boyiatzis, serves on the SST and the advisory committee. He also teaches a mindfulness and meditation class for Bronxdale 10th-graders and two Peer Group Connection (PGC) classes, in which Bronxdale seniors who lead freshman advisories develop lesson plans and activities for their classes and discuss strategies for responding to their younger peers' needs. He helps with crisis interventions and other disciplinary actions and makes connections with external organizations that work with Bronxdale, such as Global Kids. His role extends into the community of other schools that share Bronxdale's building, as well as into the neighborhood, where he engages the school safety agents and local shopkeepers to establish and sustain relationships that are welcoming for students. He is a presence in the hallways, cafeteria, and outside the building at end of day to say goodbye to students, building trust by ensuring that outside is safe as students go home and setting an example for other staff.

Social workers. The school has two social workers, Mwaniki Mwangi and Lourdes Lopez. Each has a caseload of students to whom they provide individual counseling. They also facilitate group counseling, offer crisis intervention, and participate on the advisory committee and SST. Additionally, Mwangi co-teaches the PGC course.

Peer Group Connections (PGCs)

As important as the adult staff who help organize the school's approach are the 12th-grade students who introduce their younger colleagues into the school culture by working with the 9th-grade advisory groups as mentors and sources of support. The PGC program was launched in collaboration with the Center for Supportive Schools.²² As of this writing, 18 seniors are PGC leaders. Working in teams of two, they facilitate each of the 9th-grade advisories. They use a curriculum and lesson plans developed by the Center for Supportive Schools, which they learn and review in their PGC class, co-taught by the social worker and counselor. The curriculum teaches leadership skills and strategies that the PGC leaders engage and model for 9th-grade students.

Students have to apply to be a PGC leader through a selection process involving a group interview and participation in a retreat with current PGC leaders. Criteria for selection include the capacity to work in groups and the demonstration of potential for leadership. Students who are already leaders are not necessarily selected for this role because, as Principal Quintana explains, "We want to give other students a chance."

Restrepo explained that PGC leaders work with students "in the mode of Paulo Freire, of 'Don't come in as an expert.'" (Quintana commented that every teacher has read Freire.) Students' comments confirm the dean's assertion about the operational mode of PGC leaders. Said one PGC leader, "We can guide freshmen on the right path so they don't fall off." Another commented, "We didn't know the boundaries. We want them [freshmen] to know we are not superior, that we are there to guide them." "Be close to them," said another. "Push them," added another. "If you ever need help, I can help you and talk to you; give you a good path to take," said another PGC leader. Quintana remarked that sometimes, when she asks a struggling student how he or she is doing, that student's PGC leader will tap her on the shoulder and tell her not to worry, that they are "on top of the situation."

This program supports students in both learning norms and developing the capacity to identify their own emotions and learning styles. For example, in one 9th-grade advisory, two PGC leaders facilitated a circle in which students responded to an inventory on how they like to work—alone or with others. Since students work collaboratively in many classes, the inventory is an opportunity for students to reflect on and then publicly express their preferences and concerns about their working styles as well as consider how their preferences will impact demands for collaborative group work.

The students observe a "one mic" ritual in which a student who speaks passes an object to another student, which gives that student the authority to speak. Others understand that when someone has the "mic," they must be quiet and listen. One student commented, "I would push my friends away. I like to work alone. I am more of an introvert. I need to understand the logic behind everything. I need to know what [I can] do to not be a bad friend. I can lose my self-confidence very easily." Another remarked, "I am very detail oriented. I look at the architecture when I go places." Another

noted, “I don’t like working with people. What if we get a bad grade? Sometimes I am focused on myself and do not think about other people.” Another shared, “I can lose confidence easily. It has to do with my self-esteem.” Yet another noted, “Things that describe me: I like to work alone.”

In another 9th-grade advisory facilitated by two PGC leaders, students were also engaged in responding to the inventory on working styles. One student explained, “I can’t see myself right now, but others can see me. But I shouldn’t listen to what others say. [It’s] hard for me to speak up in discussions.” The PGC leader asked, “Is this helping you overcome it?” The student answered, “Yes.” Advisory members listened quietly and respectfully.

At the conclusion of the session, the two PGC leaders summarized what had occurred and facilitated a sharing of lessons learned, demonstrating empathy, listening, and analysis skills as well as providing opportunities for 9th-graders to express empathy and the value of seeking to understand differences: “Everyone wants good grades. A lot of people don’t hold grudges—this is good. How can we use these differences and similarities to help us in our group to work together?”

By creating public spaces for students to make their coping strategies explicit, advisories create opportunities for members of a community to share knowledge and skills in support of each other.

A student responded, “Ask them why, so you can understand their thinking.” By creating public spaces for students to make their coping strategies explicit, advisories create opportunities for members of a community to share knowledge and skills in support of each other.

The other PGC leader modeled sharing information about himself to foster trust and understanding of personal differences:

I am not an imagination person. Some of you said you use imagination to put things in perspective. I can realize that now. Some said it is good to know others’ differences—you could understand them.

When the other PGC leader asked students to reveal what they discovered about themselves from this activity, student responses revealed self-reflection and insight into their behavior, especially in their responses to people who are the same as and different from them. One student said, “It showed me that there are lot of people I don’t talk to, but in future I want to because they are similar to me.” Another confessed, “I learned that I hold a grudge.” Another observed, “Some people like to talk to someone that is the same as they are.”

This freshman advisory session led by PGC peers underscores how incoming students are explicitly initiated into Bronxdale as a caring, safe, collaborative community, not with a set of rules or a lecture, but by reflecting on and exposing their similarities, differences, and vulnerabilities in a respectful setting that elicits the empathy and tolerance that will contribute to successful group work in their classes. Such experiences with the school as a safe space build trust and communicate norms and strategies for problem-solving.

PGC leaders discussed the value of older students embodying and transmitting the school culture to freshmen as well as the value of the older students having a formal opportunity to be recognized as role models. One PGC leader remarked, “You can see juniors and sophomores want to be PGCs, so they are motivated to do better so that they can be peer group leaders.” Another said, “The community gets better because of kids knowing kids across grades. There is a closer bond, like a family.” “They’re like our little brothers or sisters,” said another. PGC also builds responsibility. As one student said, “For us leaders, PGC helps keep ourselves on track because we have to think about our actions and being role models.”

Their comments indicate that their PGC leadership experience has increased their self-knowledge while providing opportunities for the development of new knowledge and skills. Two students mentioned that being a PGC leader helped them develop patience and understand that “everything is a process.” As one said, “Everything takes time.” Another student revealed that he has learned how he “adjusts in certain situations.” Another explained that PGC enabled her to develop confidence and skills in public speaking and presentation, saying, “I couldn’t speak in front of anyone. I can now talk in front of the class.” Another student felt that the PGC experience was preparing her for her future, for job interviews. Another said she has become “more excited” about her plans to become a teacher. Another has learned how “complicated lesson planning is, [because] you have to read it, do something, and make it your own.”

The PGC experience serves to deepen the peer leaders’ sense of community, their contribution to their school community, and their commitment to members of their broader community. Students frequently commented on this. As several of them noted: “Getting to know students outside of the classroom is building community.” “There was no connection at the beginning; we built connection.” “We are there for the kids and the kids are there for us.” PGC “means a lot for me. I am there for them.” “Every school needs a group of leaders for younger students to look up to. If you want to be good you have to look up to something good so that you can be better. If we have impact, we can make Bronxdale a better place.”

Other comments indicate the program’s impact on students’ development of social capital and the opportunity to contribute to the common good. One student commented, “The opportunity to know PGC leaders out of classroom opens up doors,” meaning that PGC leaders who are seniors are savvy about negotiating the school and its resources, so they can steer students in the lower grades to opportunities and staff that can help them advance their interests and agendas.

Comments by PGC leaders and freshmen attest to the program’s reinforcement of school values that undergird the school as a caring culture focused on students’ success. “Three freshmen told me something personal, and I feel good about that,” said one PGC leader. Another PGC student remarked, “We didn’t have PGC [when we were freshmen], so we fell off track,” exemplifying how Bronxdale’s changes over time have made a difference to students.

A freshman explained, “If you need help, they will guide you. We can talk to them if [we] are in a bad predicament.” The program, asserted one student, “Sets us up to be successful.” “I love PGC! I love PGC!” exclaimed one freshman, who went on to confess that he did not get into trouble anymore because he has “learned how to think about others, to not hurt others and the environment.” He explained, “I think about my actions more; so I don’t get into trouble.” Restrepo sees in PGC the impact of peer power: “Having a peer leadership model may be more effective than having teachers telling kids what to do.”

Structures, mechanisms, and practices that operationalize restorative approaches

Working together, the restorative deans, social workers, and counselor comprise the human framework for operationalizing Bronxdale’s restorative approach, which also includes the following structures and mechanisms: advisory classes, restorative circles, a mindfulness course, individual and group counseling, the SST, a support staff communication network, peer mediation, and youth court.

Advisory. As noted earlier, the school’s advisory system provides a means for students and their families to build strong relationships with teachers who serve as advisors, and for students to bond with and learn from peer advisors as well. The school has an advisory committee—including the social workers, counselor, and restorative deans—that supports the implementation of advisory with as-needed professional development and monitors the implementation of advisory curriculum and initiatives.

Mwangi pointed out that the committee has identified resources for advisory, including a bound curriculum and calendar, and facilitated after-school professional development sessions for advisors to support their understanding of what advisory should look like and how to use the resources. He explained the importance of advisory “being an experience” rather than a series of formal lessons so that it can be “a hub of relationships and a hub of restorative practice as we implement the use of community circles and other restorative approaches.” He urges advisors to improvise on lessons, to be responsive to their advisees’ reactions rather than use lessons as script. He advises teachers “to look at goals for the lesson and then improvise from there. We need to figure out how to provide curriculum as resource but encourage teachers to be flexible.”

Bronxdale’s advisory program has experienced several iterations and is still evolving: As the school advances its implementation of restorative practices and takes up the mission of enhancing student agency, the need to revise and realign advisory and restorative practices emerges. Bronxdale plans to revitalize its advisory committee, which oversees the advisory vision and curriculum, and revise the role of the advisor in order to provide students with continuous feedback and instruction on success habits and support the development of student agency. They will reestablish what advisory should look like and what supports and tools teachers need for effective implementation.

Restorative circles. Restorative circles are the foundation of the restorative approach. Participants sit in a circle, facing one another, and through dialogue, build community and repair harm in ways that emphasize making individuals and the community that have been harmed whole and productive again. Bronxdale increasingly uses restorative circles not only as a strategy to repair harm, but also as a ritual for communication about the school as a community and community building. Recently, the orientation for new 9th-graders occurred in restorative circles in order to engage incoming students in dialogue. The restorative deans provide professional development in restorative circles for the staff. They have introduced the concept and modeled circles, facilitated sessions on how to use them, and held conversations with teachers.

Individual and group counseling. Guidance counselor Nick Boyiatzis provides individual and group counseling either when it is mandated by a student’s IEP or when a student is at risk emotionally or in crisis. The counseling adds an additional layer of support that helps students problem-solve and manage their responses to stress so that they are able to function productively.

Mindfulness. Many teachers also incorporate explicit mindfulness strategies or stress management tools into their classes. Science teacher Geneal Chichester begins her class with a circle, which she says “helps with discussion” and connects students to the classroom community. Boyiatzis teaches a class devoted to mindfulness, which he says “falls in line with having students be able to be empathetic, helpful, [and] self-reflective,” but that also “gives them some tools so they are able to manage difficult emotions: tools to be able to self-regulate” and develop the self-awareness to know, for instance, when they are getting angry, the idea being that “students will respond to the environment rather than react to it.”

Student Support Team (SST). Comprising the restorative deans, social workers, counselor, and assistant principal who oversees guidance, the SST is the coordinating mechanism for all of the social-emotional supports at the school. The team meets with the principal to recommend policy and practice in the social-emotional sphere, manage discipline and interpersonal crises, and support staff with formal and informal professional development to implement restorative approaches.

Support staff communication network. There is a comprehensive, finely tuned formal and informal communication network among support staff to keep the adults informed of school tone and potential trouble spots on an ongoing, in-the-moment basis. This network, which functions like an early warning system, includes the restorative deans, social workers, counselor, community associate, parent coordinator, and aides. As Restrepo explained, “School aides are on posts and let us know when things are happening. If there is a fight [or a potential one], a dean or social worker will likely be the immediate responder and de-escalate by keeping the students physically separated, finding a physical place where the kids can de-escalate and calm down, and giving them what they need.” Administrators and teachers are also drawn into the network: “We text message and email advisors to check in with the students. We coordinate with other staff members through group text messaging and radio work to prevent a kid from making a phone call, knowing kids and what their likely response will be, and an SST member will communicate with administration if violence has taken place.” Communication takes a deliberately nonpunitive perspective and emphasizes a “repair harm philosophy,” said Flores. “Messages to staff about incidents are pro-student and framed as a mistake and manifestation of that child’s struggles. And most of the time, it is.”

Communication takes a deliberately nonpunitive perspective and emphasizes a “repair harm philosophy,” said Flores. “Messages to staff about incidents are pro-student and framed as a mistake and manifestation of that child’s struggles. And most of the time, it is.”

Peer mediation. At the time of our study, Bronxdale had 10 peer mediators across the grades who were empowered to help mediate issues or problems among their peers. Students selected the group of peer mediators after school administrators explained the role and instructed them to select individuals they could trust. The process provides for students involved in a disagreement to meet in a safe and private setting to work out their dispute, mediated by one of the student mediators. A restorative dean commented, “Students talk through the issues they have with each other rather than us telling them what they should do.”

Because only a limited number of students are trained in mediation and the SST mediates student disputes, peer mediation is not the primary tool for managing disputes at Bronxdale. However, in order to increase student empowerment, peer mediation is now offered as a club and the school is publicizing it as an option in the future.

Youth court. Youth court is a program that provides training for adolescents to lead hearings and adjudicate cases involving infractions by their peers. Remedies focus on restorative justice so that students take responsibility for their actions. Sanctions often involve community service, apologies, and skill development.²⁵ Faculty are also involved in training so that they can guide students and oversee the process.

Changes in student–teacher power relations

Bronxdale’s commitment to student voice, agency, and school community membership changes the dynamic of school adults’ authority and student powerlessness that defines typical schools and classrooms. Instead, in contrast to the punitive approach, students and teachers work together to resolve interpersonal conflicts. One teacher commented, “Kids will talk to you about conflicts they may have with you.” When there are conflicts, teachers and students confer so that the teacher can continue to teach the student, the conflict is not an obstacle to the student’s learning, and teachers do not hold grudges. A restorative dean may mediate, facilitating a conversation between the teacher and student about how the conflict arose so that they come to an understanding that de-escalates emotions and generates a resolution.

One teacher described a situation in which the student had to perform community service by helping her clean out a storage closet. The time during which they worked together on this task provided an opportunity for the teacher and student to talk so that they could have what the teacher described as a “good moment.”

Flores and Restrepo informally coach teachers to facilitate resolutions and visit classes to provide informal feedback on how teachers can work effectively with students. They also “give students tips on how to get on with teachers and how to address the drama of what gets in the way of their learning.” Two teachers mentioned that they had stopped confronting students and instead adopted strategies to support students in taking academic risks, reducing students’ frustration with making mistakes and increasing their effort. Although the process of change in strategy contained its own frustrations, both teachers felt that “This is the way things are done here.... We talk about problems here.” They added that the principal provides opportunities and time for them to participate in professional development that helps with such transitions.

Equally important is that school leadership refuses to deny, minimize, or ignore the additional burden and stresses—the micro- and macro-aggressions—that societal inequalities and inequities, such as institutionalized racism, impose on Bronxdale students. The faculty and staff feel an obligation to help students acknowledge the unfairness of these conditions but also learn that they have choices in how they respond and what those responses might look like. The community and sense of belonging that Bronxdale provides is intended to help students survive these conditions and learn how to recover the sense of wholeness and confidence that such embedded and explicit societal aggressions can undermine and diminish. The school has partnered with an organization, Border Crossers, that provides professional development for examining issues of race and racism, so that staff, as a community, can build knowledge and understanding about these effects on students and how to powerfully address them in order to help students build their resilience.

III. Instruction That Supports the Way Students Learn

Carolyn Quintana regularly notes that the goal at Bronxdale is to “teach the way our students learn best.” Evidence from the learning sciences suggests that, to meet 21st-century learning goals, productive instructional strategies support *motivation, competence, self-efficacy, and self-directed learning* using curriculum, teaching, and assessment strategies that feature:

- meaningful work that connects to students’ prior knowledge and experiences and actively engages them in rich, engaging, motivating tasks;
- inquiry as a major learning strategy, thoughtfully interwoven with explicit instruction and well-scaffolded opportunities to practice and apply learning;
- supports to reduce cognitive load and free students’ minds to focus on higher-order thinking and problem-solving;
- well-designed collaborative learning opportunities that encourage students to question, explain, and elaborate their thoughts and co-construct solutions;
- a mastery approach to learning supported by performance assessments with opportunities to receive helpful feedback, develop and exhibit competence, and revise work to improve; and
- opportunities to develop metacognitive skills through planning and management of complex tasks, self- and peer-assessment, and reflection on learning.²⁴

All of these features are readily apparent in Bronxdale classrooms, where teachers use every tool at their disposal to teach an inquiry-oriented college preparatory curriculum to heterogeneous classes of students, many of whom have experienced relatively little academic success before coming to the school, and about one third of whom are identified for special education. The skillfulness and pervasiveness of teachers’ approaches to connecting to students’ prior experiences and scaffolding their learning toward ambitious curriculum goals is apparent. In addition, the faculty realizes the key insight from recent research—that learning is a function both of teaching and of students’ perceptions about themselves as learners. Students will work harder to achieve understanding and will make greater progress when they believe they can succeed. A growth mindset—the belief that effort will lead to increased competence—is essential to motivation and learning.²⁵

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In addition, faculty realize that the learning environment supports motivation when learning and mastery goals are emphasized and when teachers provide support; recognize effort and improvement; treat mistakes as learning opportunities; give students opportunities to revise their work; emphasize learning when evaluating; minimize individual competition and comparison; and group students by topic, interest, or choice.²⁶ In addition, insights from the learning sciences reveal that people are motivated by interactions and develop neural pathways when they produce and receive language in conversation,²⁷ which means that intellectually stimulating classrooms should actively support discussion, debate, and collaboration—another consistent and well-structured feature of Bronxdale classrooms.

Goals for Learning

The collective vision for what Bronxdale faculty wish their graduates to learn and become not only drives the school's culture, but also drives its approach to curriculum, instruction, and assessment. At the most fundamental level, a Bronxdale education endeavors to provide students with “different ways of viewing the world, communicating about it, and successfully coping with the questions and issues of daily living.”²⁸ The school website states:

Rooted in inquiry-based learning, Bronxdale High School is dedicated to fostering a realistic, relevant and hands-on educational experience for all students.

Through collaboration, both in the school and surrounding community, students will be immersed in an environment that:

Engages inquiry – Promotes proactive learning – Cultivates curiosity.

Support[s] student thinking and helps them to communicate with clarity and precision in order to instill an intrinsic desire for life-long learning.²⁹

Students regularly undertake projects, including a senior year capstone project, in which they have opportunities to make choices and engage with topics they find relevant, and where the work is framed by who they are and the world around them. Such experiences go beyond the merely academic, providing students with occasions to practice skills they will use in the outside world. In this intellectually challenging environment, Quintana maintains that students' success “cannot happen without taking care of students' social-emotional needs, especially where kids experience trauma, which occurs in this neighborhood.” Taking care of students' social and emotional needs means integrating particular opportunities through which students experience their school as a caring community into their academic classes, where the stresses of rigorous learning and achievement are also omnipresent. The conviction—that these needs must be addressed so that students can achieve—explains the school's emphasis on integrating social-emotional and cognitive development through instruction.

Getting to Student Achievement: Instruction at Bronxdale

How do Bronxdale teachers approach teaching and learning so as to move students to the desired outcomes? Because of its integrative quality, Bronxdale's instructional approach poses a challenge to neat disaggregation. Here, we consider broadly what we saw teachers trying to achieve through their teaching, as well as what kinds of tools and knowledge they used to do so. Specifically, we saw teachers address the school's larger aims in their classes through the following three key strategies:

1. Building community to allow adults and students to know each other well
2. Designing and implementing inquiry-based instruction
3. Incorporating explicit development of social, emotional, and academic skills

To make these strategies work, teachers draw on a variety of knowledge, skills, tools, and resources: devices that we saw repurposed for use toward multiple ends. For example, the protocols that teachers draw on to help create consistency and a sense of safety for students also serve to structure and organize students' thinking in academic tasks. Teachers use instructional practices in service of building relationships, just as they capitalize on their knowledge of students to devise activities

that achieve academic ends in part by meeting those students' interests and needs. In the following pages, we describe what Bronxdale teachers do and the tools they use in their efforts to build community, design and implement inquiry-based instruction, and incorporate explicit teaching of social-emotional skills.

Building community

Because, as Quintana makes clear, the school's inquiry-based approach "can't happen without taking care of students' social-emotional needs," teachers work to create an infrastructure of community, building trusting relationships with students and establishing an environment of belonging and safety. That community, in turn, enables students to take on and persist at the academic challenges of school. It also allows teachers to know each other and the students well and thus make connections between students and the curriculum, while collectively addressing student needs. This foundation is implemented explicitly through interpersonal interactions between teachers and students, as well as among students, and through structured classroom routines and protocols and teachers' choices of curricular content and instructional strategies.

Knowing students well. Teachers draw on a variety of structures and activities that help them get to know their students well and build a sense of trust. By design, Bronxdale's teachers have responsibilities in addition to teaching, such as coaching and committee work. Quintana believes that these additional roles—made possible by fewer teaching hours—increase students' opportunities to have multiple interactions with teachers.

Teachers' multiple roles also help them build relationships with each other, which are then modeled for students. As special education teacher Caitlin O'Loughlin observed, the kids know that the teachers are friends and that they work together and get along. English teacher Julie Maserof concurred, saying that students "sense [the web of faculty relationships] intuitively. That helps them, that we model that behavior for them," reiterating science teacher Geneal Chichester's point that "teacher collaboration supports the school culture." Teachers regularly meet together after school to share and receive feedback from peers on their lessons and to focus on challenges they may be facing with particular students—another way to come to know their students from multiple perspectives, as teachers see different aspects of students in their work as instructors and advisors.

Teachers work to get to know their students, as math teacher Mary Zelenka described, finding out their interests, learning about their families, and appreciating the funds of knowledge that students bring. With such understandings at hand, teachers are well positioned to recognize and understand their students and to let students know they care about them. As one student commented, "[They know you] for who you are."

Students talked about the presence of strong teacher–student relationships as a distinguishing factor of their Bronxdale experience. Whereas most high schools just "do what's expected," according to students, Bronxdale is a place where "teachers try to get to know you." Because "teachers listen," students believe that their voices are heard in the classroom and they can talk to teachers about their problems. In fact, students actually run a professional development session for teachers focused on what students believe they need to be successful.

Carefully chosen instructional practices also go beyond purely academic purposes and function as a significant way for teachers to know and respond to their students. Activities such as journaling, class meetings, regular one-on-one check-ins, and careful observation of the young people in their classes help teachers elicit meaningful information about what is happening in students' lives and minds. Curricular choices, such as framing the 9th-grade experience in the theme of self/identity, or an English teacher's use of a personal narrative assignment to explore self and text, provide additional opportunities for students to share important aspects of their lives and for teachers to draw on those in connecting and developing additional curriculum.

Students expressed their awareness and appreciation of teachers' willingness to open themselves to students and disclose aspects of their own lives. For example, a student described one freshman English teacher as a "relatable" person, who showed "he was human by relating what [we] read to his life." In another case, a student recalled her global studies teacher sharing background stories, while someone else remembered that the teacher in whose class he read Sherman Alexie's *Diary of a Part-Time Indian* shared his personal connection with the book and encouraged his students to do the same.

Creating safe classrooms. The classroom is a microcosm of the larger school culture, which, as we have described, is designed to create a safe haven within a larger (external) community that students and staff identify as unsafe. Teachers carry this charge into the classroom, building on the relationships and trust they have with students to help them feel physically and emotionally safe, but also safe to grapple with difficult or challenging academic tasks. The latter especially matters if young people have not encountered success in their previous schooling experiences, as is the case with most Bronxdale students.

Part of the community building that teachers do involves creating "identity-safe" classrooms, where all students feel they belong.

Part of the community building that teachers do involves creating "identity-safe" classrooms, where all students feel they belong. Social psychologists have studied the effects of *social identity threat*, which can affect members of groups that have been evaluated negatively in society, for example, on the basis of race, ethnicity, language, income, sexual identity, disability status, or gender. This fear of being judged in terms of a group-based stereotype induces stress that impairs working memory and focus, leading to poorer performance on school tasks as well as a kind of protective hypervigilance that can cause students to become defensive and reactive to even small events.³⁰

Teachers at Bronxdale understand that to offset the discriminatory messages many students receive in society at large, they have an obligation to act affirmatively to make it clear to students that in this environment they will be safe, protected, and valued.³¹ At Bronxdale, students talked about their sense of safety. One noted that LGBT students feel accepted, saying, "They can relate to teachers who are gay—they can feel safe here." Another student noted, "In middle school, teachers didn't really care about what students were doing; teachers never said anything if kids made fun of me." Still another identified accountable talk—or talk that is used for promoting higher-order thinking, but that is also respectful, meaningful, and appropriate—as a critical mechanism that helps students to feel safe. Making individuals "accountable" for their words within the community ensures that "no one makes fun of you."

As mentioned by science teacher Geneal Chichester, debate in the classroom offers another way for teachers to support students in learning to listen to and respect what is being said. In art classes, teacher Jocelyn Santos described how students are primed for critiques: They participate in discussion about supportive versus unsupportive language, which reinforces how to give a critique that is respectful of and helpful to one another, and they benefit from Santos's efforts to model this behavior. In addition to promoting students' social comfort, such tools and practices set norms for students to interact productively around intellectual tasks as well. A 9th-grade teacher remarked on the progress he saw in students' ability to give and receive feedback from peers and teachers. He pointed out, "They are no longer offended when peers give critical feedback. That's a big deal."

Getting students comfortable with the idea of making mistakes is another essential part of readying them for academic work at Bronxdale. As the teachers agreed, students tend to want to do something perfectly the first time and, if they cannot, they get frustrated or embarrassed. Yet it is hard to get to deeper learning, in math teacher Mary Zelenka's view, until kids "get" that it is okay to be wrong. As she said, "I have to make mistakes in order to grow and get to a deeper learning spot." But as she recognized, students need to feel safe to make themselves vulnerable to making mistakes. Teachers try to normalize risk and failure through what they call "Teach the Teach," which allows students to point out teachers' mistakes. And in Zelenka's math classes, she works to get students accustomed to what she calls "nonroutine" problems, giving them tools and experiences that help them when they are "stuck." In this way, she makes uncertainty an accepted part of the culture, because she has helped students develop the mindset and toolbox to feel that "it's okay not to know, but not okay to sit there and do nothing."

Enacting cultural competence. Finally, teachers use cultural competence to build community and help align school with students' identities, interests, and backgrounds. At the most obvious level, teachers choose culturally responsive content for their classes to enhance connections and relevance, as well as to communicate that a range of cultural experiences belong centrally in school. For example, English teacher Julie Maserof chose the novel *Bodega Dreams*, a text set in East Harlem with characters relatable to students' lives, for her [sophomore] class, while AJ Cloherty and Caitlin O'Loughlin chose a set of poems by Langston Hughes, also set in Harlem, to explore how artists' contexts affect their writing in their freshman English class. Such culturally relevant content is not limited to humanities topics: For instance, Zelenka's algebra class worked to solve "Marissa's Dilemma," in which students had to tap the mathematical logic behind linear equations to determine whether a young lady, Marissa, made it home from a party in time for her curfew.

Designing and implementing inquiry-based instruction

The larger field of education research has yet to come to consensus on a "specific and well-accepted definition" of inquiry-based instruction, though the term popularly connotes student-centered, hands-on, exploratory activities; student responsibility for learning; and active thinking.⁵² Bronxdale's approach includes these elements, with a strong emphasis on learning that will enhance student agency and ability to transfer knowledge. At Bronxdale, inquiry-based instruction involves students' opportunities to participate in projects of interest that allow them choice and agency, and that enable them to practice skills broadly valuable outside of their school experience. Teachers and administrators at the school describe how their student-centered inquiry approach aims at "deeper learning," or learning that goes beyond the absorption of academic content to the

ability to apply understandings to novel problems and new situations that individuals will face in the real world. The school embraces the definition of inquiry as “a seeking for truth, information, or knowledge—seeking information by questioning.”

Accordingly, in Bronxdale’s inquiry-based approach to teaching and learning, educators focus on developing students’ inquiry skills and nurturing inquiring habits of mind that, ultimately, “will enable [students] to continue the quest for knowledge throughout life.” Indeed, inquiry-based learning at Bronxdale operates on the premise that school and life are deeply connected, and that helping students learn to ask questions, think critically, and pursue answers serves as important preparation for life. This is especially important where students’ real-life experiences may contradict society’s official narrative.

Teachers at Bronxdale understand that learning is not a matter of pouring information into students’ heads. They recognize the process instead as dynamic and deeply dependent upon the multiple identities (individual, race, class, income) of the students in front of them—their existing knowledge, experiences, backgrounds, and interests. As a result, Bronxdale educators use an inquiry-based approach to instruction that (1) begins with who and where students are; (2) provides supports that enable students to take academic risks and move toward deeper learning; (3) involves students in relevant, engaging tasks that have disciplinary integrity; (4) develops students’ ability and confidence to guide their own learning; and (5) builds student voice and agency within the creation of an intellectual community.

Beginning with students. Teachers get to know students in the service of developing community, but knowing students also enables teachers to design instruction that builds on students’ particular strengths, interests, and experiences in culturally responsive ways. Learning scientists point out that all learning is about making connections between what we already know and what we are learning—and that learning tasks are most motivating and effective when they build on and draw connections to learners’ experiences and interests.

Teachers get to know students in the service of developing community, but knowing students also enables teachers to design instruction that builds on students’ particular strengths, interests, and experiences in culturally responsive ways.

Most evidently, the projects that allow students to choose and research subjects of interest—the senior capstone project or the science research project, for instance—draw connections to students’ individual predilections. One student’s science research project entailed a study of depression and the development of a mental health curriculum, which she presented to the science department. Other capstone project topics included studies of body shaming; the origins of hip-hop; how gender differences impact getting schizophrenia; overfishing in Japan; and nonviolence in the USA, Japan, and Australia. One student’s project engaged him in an entrepreneurial experience: He planned to research how music makers gain a following on social media and to develop a business page on Instagram, post his own and others’ music, and keep track of the number of followers that accrue.

Teachers also use students' lives as a bridge into academic material. For example, Julie Maserof began one of her English classes with a "Do Now" intended to prepare students to think about conflict in the novel *Bodega Dreams*. The essential question for the day's lesson asked students, "What do good readers do to analyze conflict in a text?" and the learning target for the day was "I can make inferences about a character's conflict in a text." Maserof began by asking students to consider the question "If you had to choose between what a romantic relationship/spouse wants from you or what a best friend wants from you, who would you choose and why?" Students expressed their opinions animatedly in their "turn and talk," and when Maserof opened the discussion to the full class, the debate continued.

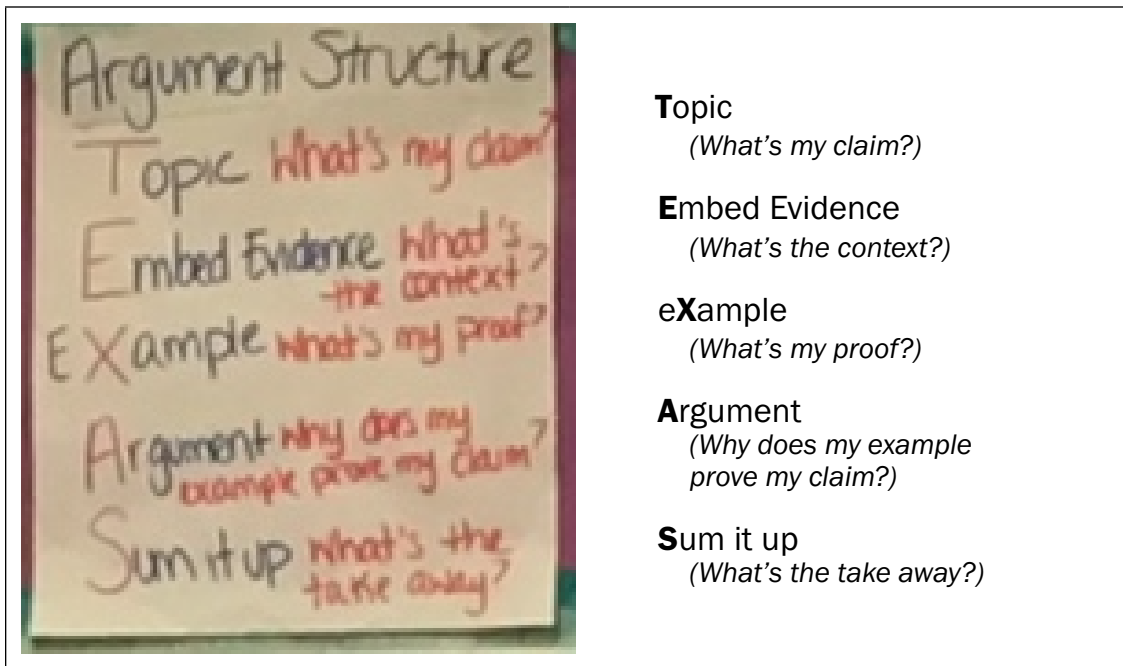
Maserof then skillfully moved students into the academic concept of analyzing conflict in a text, again drawing on their lives by reminding them of the personal narratives they had written earlier in the year, and how they "had to inject conflict to make it interesting." She also provided an academic definition of conflict: "a literary element that authors use to drive the plot in order to have a resolution." Maserof delineated several types of conflict—internal, character vs. character, character vs. nature, and character vs. society—and asked students to recall other texts that they had read, such as *Diary of a Part-Time Indian*, and identify the type of conflicts they had encountered there. While Maserof began by eliciting students' personal experiences, she also worked to connect what students were learning that day in her class to what students already knew: thus, the references to novels the students had analyzed and assignments (the personal narrative) they had worked on in the past.

The purposeful referencing of past learning (including students' prior academic knowledge) occurred in a variety of ways across classes. For example, before beginning the "Do Now" at the start of her class on linear equations, Mary Zelenka reminded her students that "once you get [to the next part of the problem], our investigation from yesterday will help you answer the question." In a 9th-grade English language arts class in which teachers asked students to perform on-demand writing, they reminded the students, "You have done this before." Their reminder both signified a connection to past academic experiences and served as an emotional support for students, an encouragement that they had already encountered and worked through this kind of task before.

Scaffolding student learning. Teacher support forms the bedrock of Bronxdale's inquiry-based approach—as one teacher remarked, the "students are calm because they know they can get support." Structure and consistency of routines across classes provide an important source of support that students need in order to feel safe and calm. One teacher noted that common routines had helped students across the 9th, 10th, and 11th grades to become more capable. The 9th-grade team leader, who encouraged the use of common protocols across classes and grades, emphasized that "consistency has made all the other stuff possible." Some of the consistency derives from simple routines, such as the posting of an essential question for the unit and for the day's lesson, along with learning targets, on the board in every class, or the "Do Now" that begins every class. There is the "mic" that is passed around to denote who has the floor to speak and that governs the way conversation occurs. Restorative justice prompts are prominently displayed and used in all the classrooms.

Perhaps most impressive, the faculty has developed a set of common protocols that structure a wide range of classroom activities. For example, argument structure is embodied in the TEXAS paragraph, presented to students in a graphic familiar across disciplines. (See Figure 5.)

Figure 5
The TEXAS Paragraph



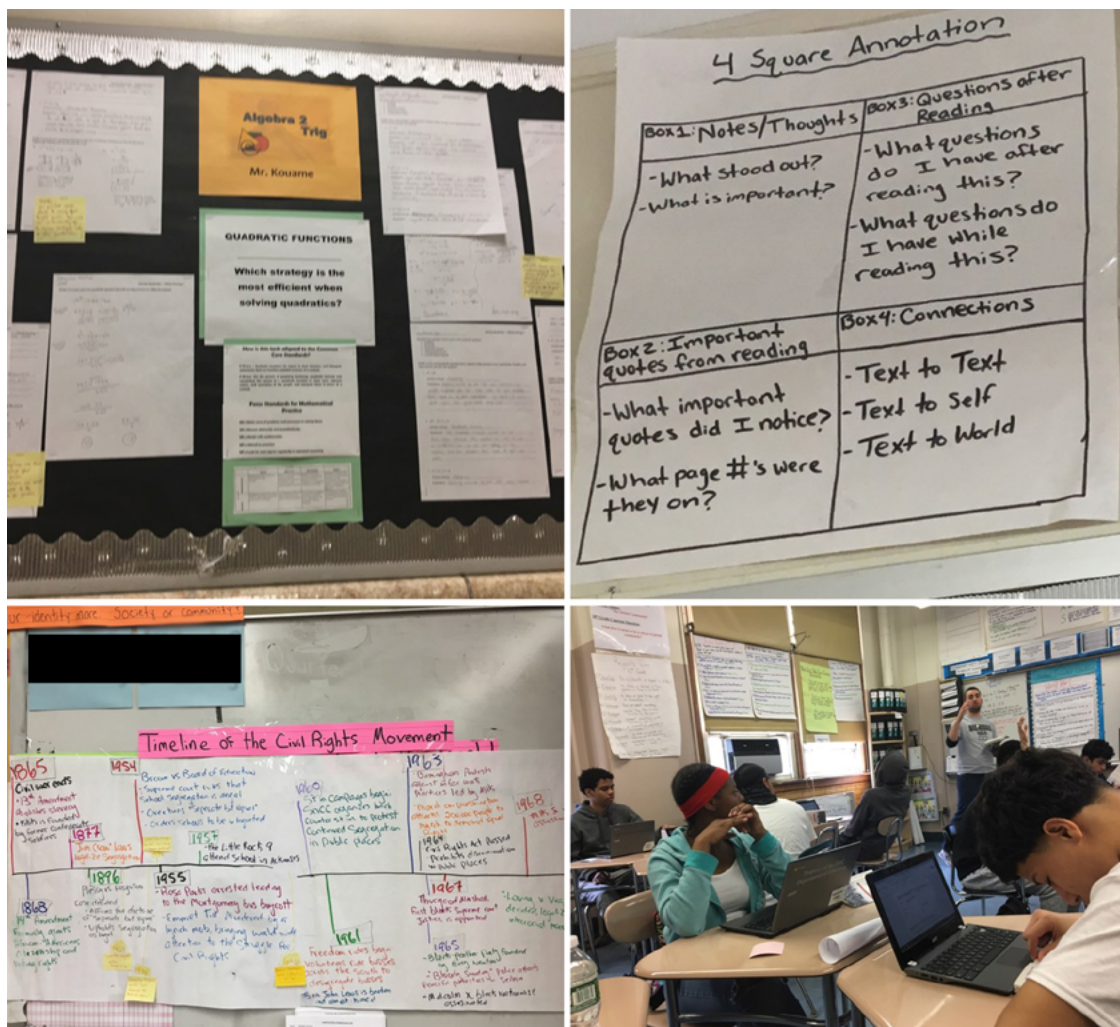
In a history class, students were asked to write a TEXAS paragraph to answer the question “What are some ways the colonies developed a culture of democracy (i.e., gave people a voice in their government)?” Or students might use a KNN chart, which helps them organize information according to what they already Know, what they Need to know, and Next steps. In algebra, the “know” section could include “necessary evidence from the problem that can be inferred”; the “need to know” category might “state the question being asked, as well as other questions that need to be answered”; and “next steps” would involve listing “specific strategies to use in solving the problem.”

A document protocol known as SCRAMS was designed to help students evaluate primary sources by directing them to examine the **S**ource and the **C**ontext, to **R**ead the question, to **A**nnotate, attend to the **M**ain idea, and account for the “**S**o what?” of the source. Accountable talk sentence starters help students to structure and deepen their discussions, providing them with stems such as “I agree with _____ because ...” and “I would like to add on to _____’s point.” Such devices are hardly unique to Bronxdale, but what makes them work so well there is the consistency with which they are used across classrooms, grades, and subject areas, and the way they are exploited for the benefits they offer to classroom culture. That is, the protocols not only structure students’ intellectual work; they also offer important scaffolding to what may seem to be daunting or unwieldy tasks, and, used regularly across the school, they ease students into accepting uncertainty and the risks inherent in mistake-making, providing students with a sense of comfort and support—alleviation of anxiety—that transcends a single teacher or classroom.

Cognitive scientists discuss the importance of reducing cognitive load so that learners can attend to what is most important without being distracted by all of the stimuli and memory tasks that could otherwise overwhelm them. They emphasize that consistent structures, supports, and affirmations that allow the student to know what to expect and how to be successful reduce cognitive load and free up the mind for learning other challenging material.³³

Visual scaffolds. These include wall charts in each classroom reminding students of their learning processes, as well as key concepts such as definitions, timelines, and key strategies. These support self-regulation and strategic learning while reducing cognitive load, thus supporting students' pursuit of higher-order thinking and performance skills. (See Figure 6.)

Figure 6
Visual Prompts and Scaffolds



These also enable student self-assessment, as well as peer and teacher feedback that is part of an ongoing formative assessment process. Routines for reflection on and revision of work support the development of metacognition and a growth mindset.

Many of the frameworks and protocols that create consistency and ease students' anxiety also provide structure for academic tasks across subject areas, which in turn allows students to organize their thinking and even see patterns and connections across ideas. The teachers who planned the 9th- and 10th-grade curriculum made sure to align the skills from those years, in the belief that "kids are better at asking deeper-level questions, better at finding evidence from outside texts [when they have this consistent structure]." Thus, the TEXAS paragraph, accountable talk, the KNN chart, and the SCRAMS document protocol all offer students ground rules, or a structured way to engage in the intellectual task at hand.

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Such tools afford students entry into an academic conversation, but getting to deeper learning requires additional supports. For example, across classrooms, teachers **model academic processes**. Such modeling may be deceptively simple—as in a special education teacher highlighting certain words or phrases in an algebra problem on the smart board, drawing students' attention to key terms but also displaying a way to approach the solving of that problem, or teachers employing the regular use of disciplinary-appropriate academic language as they describe or discuss material. Or it may be more complex, such as an English teacher demonstrating how to identify a particular feature in a text and then inviting students to do the same, or a math teacher leading the class through the process of figuring out a linear equation word problem. In one classroom, the English teacher read out loud to students, helping to model fluency in diction and tone, which contributes to language acquisition skills and supports deeper comprehension among students.

Across classrooms, teachers also deploy **skilled questioning** to deepen students' academic engagement. Guiding questions help to frame and structure inquiry for students. Follow-up probes encourage students to go deeper: "Do you want to clarify?" "What do you mean?" "Can you explain your thinking?" "Can I do that with what is provided?" "How else could we represent this information?" "What did we learn that we didn't know before?" Acknowledging the importance of such questioning, one student commented, "Teachers want you to say why you think what you think." Another chimed in that, because Bronxdale is an inquiry-based school, they "have a lot of discussion" and "get out their ideas and opinions.... You hear a lot of 'I agree,' 'I disagree.'"

These debates are thoughtfully bounded by rules of engagement, and teachers' questioning helps students to get to the next level in their thinking—that is, make new meaning—as they take part in such exchanges. Teachers press students toward higher-level responses, commenting, "I want to see nuanced answers," pointing out that "I disagree with you" is rather low level, while "interesting point, but I disagree with your reasoning" constitutes a higher-level response, which encourages students to specify, name, and organize their thinking. Through their own interactions with students, teachers model these more specific responses as well. All of these strategies enable teachers to focus on students' thinking rather than simply identifying a "wrong" response, which helps them to redirect the thinking on students' part that may have led to erroneous or low-level responses.

Another move that teachers use to support deeper learning involves providing students with necessary, **“just in time” interventions**. This requires teachers to carefully monitor students’ classroom experience on an ongoing basis. In general, teachers tend to circulate among the class, observing what students are doing in response to a task, and use careful questioning to elicit student responses, which in turn make students’ thinking visible so that teachers can address any particular struggles or misconceptions by asking more targeted questions or making specific suggestions. This strategy scaffolds the task in ways customized to a particular student’s issue in the manner Diana Lufenberg, founder of the nonprofit organization Inquiry Schools, notes of the kind of teaching practice required to make inquiry-based learning work: “Teachers have to ... become experts at listening to how a student is thinking and then ask the one question that will ‘unstick’ the students’ thinking and set them off and running again.”⁵⁴

Differentiation of instruction is also critical, particularly in an inclusive school such as this one. An example of how this scaffolding and differentiation occurs can be seen in the inclusive 9th-grade English language arts class taught by AJ Cloherty and Caitlin O’Loughlin, a general education and special education teaching team.

Differentiating Instruction in Action

AJ Cloherty and Caitlin O’Loughlin are teaching a civil rights literature unit that asks the essential question “How do the circumstances surrounding an author impact their work?” This particular lesson asks, “To what extent has America lived up to its promises?” The texts to be examined are three Langston Hughes poems—“Mother to Son” (written in 1921 when he was 19 years old), “Let America Be America Again” (written in the depths of the Great Depression in 1936), and “A Dream Deferred” (written in 1951)—along with the framing statements for the Constitution and the poem on the plaque on the Statue of Liberty, as well as their own experience and knowledge of current events.

The students have already done some homework responding to specific questions about the Hughes poems, such as “What are the two things being compared in this metaphor or simile?” “Which option happens when a dream is deferred?” and “How may the tone be different between this poem and others later on in his life?” They begin by logging into Google Classroom to call up the materials and engage in a free write, answering the question “To what extent has America lived up to its promises?” The teachers circulate to evaluate student responses, pushing for deeper answers or more connections, offering a provocative question or making a suggestion when a student seems stuck, individualizing their assistance to student needs.

Students then share their responses electronically and have an opportunity to respond to three different posts. In a follow-up discussion, some responses are displayed on the SMART board to illustrate particular ideas or demonstrate effective responses, providing models for other students. Following the discussion, students are asked to engage in a more complex literary analysis in response to the following prompt: “Using the poems by Langston Hughes, analyze to what extent the circumstances surrounding an author impact their work.”

The teachers have planned for three levels of differentiation for students in this task. Student teachers sit with Level 1 students who may struggle with the task in order to provide direct assistance to help them navigate the question and prompt them as needed. Teachers can direct the students to the many visual guides throughout the room, which remind them of aspects of the writing process and the use of evidence, as well as to the model responses that were shown earlier.

Students are expected to make a comparison between at least one of the poems and at least one other reference from the homework, the pre-write, or a current event. As teachers circulate, they prompt Level 2 students to use at least two of the poems and additional input, offering them discussion-furthering stems and referring them to models and the rubric to help them think about how to improve their work. Level 3 students are expected to address all three poems and are supported with questions and suggestions that encourage them to “go for the challenge” by referencing changes in the tone of the poems over time and using earlier research, current events, and homework to interpret how circumstances affected the author.

This approach to differentiation is a guide, not a recipe or a straitjacket. Support is individualized, and students at each level are continually challenged to increase their capacity. But as a result of these plans, all students are productively engaged in the same high-level, serious inquiry in each classroom with the supports they need to make progress.

As in the example above, teachers often employ technology that makes students’ responses available to them and the whole class in real time, affording teachers the chance to intervene at crucial moments and students the opportunity to engage in dialogue. Students will often submit responses that appear on everyone’s computer screen as well as on a large screen at the front of the room. The teacher can direct students to reply to one or more responses from classmates and can highlight particular responses for further discussion. These strategies also give teachers more access to student work and thinking in real time, so that they can address misconceptions or add important insights to propel the work forward. Because students can see the responses of their peers in real time, they can engage each other’s thinking, contribute ideas, and improve their own thinking and writing.

Carefully watching and listening to students allows teachers to see what other contextual information students need to deeply understand their work. A 9th-grade teacher recounted how she and her co-teacher noticed students’ lack of historical and current information about the American Indian experience, which created difficulty for students in making sense of some aspects of the novel they were reading (*Diary of a Part-Time Indian*). Consequently, the teachers have begun to present six topics pertaining to the past and present of American Indian culture and issues (such as the Dakota pipeline, sports mascots, and life on a reservation) so that students enter the book with contextual knowledge. Critical to teachers’ ability to provide this support was their close reading of students’ prior knowledge and the gaps that were making it hard for those students to connect with the academic material.

Finally, another way that Bronxdale teachers support students in their academic learning lies in their careful balance between explicit instruction and inquiry. For math teacher Mary Zelenka, teaching algebra (a Regents-tested subject) is always a “trade-off between Regents prep and inquiry teaching.” Over her 6 years at Bronxdale, Zelenka has found it appropriate at times to “do the rote learning” as ballast for some of the student-centered inquiry that her class does. On the other hand, teachers recognize when it is appropriate for students to simply explore materials and ideas. A geometry teacher recollected giving students a whole period to practice using a compass. She explained how she builds a routine around the “use of the tools,” and how she models the use and the strategies, always emphasizing for students that there isn’t anyone in the room “who knows everything.” Principles associated with the science of learning and development advocate just such a balance, suggesting that teachers should design “relevant, problem-oriented tasks that combine explicit instruction about key ideas ... with well-designed opportunities for inquiry.”³⁵

Constructing engaging tasks with disciplinary integrity. Teachers’ knowledge of students, along with the manifold supports they provide, enable them to develop curriculum that is relevant, engaging, and inquiry-based in their respective subject areas, teaching students the core concepts and modes of inquiry at the heart of the disciplines. An example can be seen in Julia Baskin’s 11th-grade U.S. history class.

Scaffolding Inquiry-Based Instruction

Julia Baskin is introducing students to a new unit organized around the essential questions “Why did the 13 colonies risk everything to rebel against England? What are the foundational elements of our government?” The question driving the day’s lesson is “How did the 13 colonies develop a culture of democracy?” These orienting questions are posted at the front of the classroom, along with learning targets that identify both concept- and skills-related goals, such as “I can identify factors that influenced the growth of democracy in the 13 colonies” and “I can use gallery walk protocols to learn and synthesize information.”

Baskin begins by drawing students in with a gripping film clip. She frames the viewing with this explanation: “We’re going to start with a video about John Adams. It’s intense. I’m not showing it to you so you scream in horror, but because it shows some tensions happening in the colonies.” She invites students to ask themselves as they watch, “What’s going on? Why is it happening? What does it tell you about the colonies?” Her strategy encourages engagement that will help students make sense of what they have experienced. With this preface, Baskin shows a 3-minute clip from a documentary in which a tax collector is tarred and feathered by a mob.

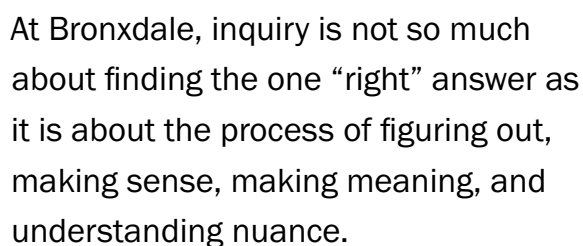
Giving the students a few moments to process what they have seen, she then looks for their responses, asking: “What happened? Why? Let’s talk about it!” Several students fill in the basic arc of the clip: A tax collector wanted to tax the goods on a ship, but the people did not agree and, because he was by himself, the crowd tarred and feathered him. “They wanted to hurt him,” points out one student. Another student discusses the roles played by Sam and John Adams in the melee. Baskin hones in to pursue this point: “Do you want to clarify?” “Why did they do that?” She reminds students, “This clip shows how things were heating up [in the colonies],” and further establishes that, while the video was just a re-creation, “we know from drawings and cartoons from this time that this [kind of] stuff really happened,” neatly linking what they have just seen in the video to primary documents that provide evidence of such occurrences in the past.

The video provides Baskin a compelling way to draw students in, to help them understand how very intense the conflicts were becoming between England and the colonies. The discussion leads to the study of primary source documents in what she calls a Colonial Democracy gallery walk, where students circulate in small groups through various stations of primary sources, discussing the documents and writing down two or three key insights regarding the essential questions stimulated by each collection of documents. When they have completed their analysis of the documents, each crafts a TEXAS paragraph answering the question “What are some ways the colonies developed a culture of democracy?” The activity requires students to analyze texts, to practice history-specific skills of interpreting primary source material, and to engage in critical thinking to fashion their own analysis.

Faculty member Sean Garvey pointed out the significance of the school’s emphasis on research, which ties directly to both deeper engagement and deeper learning and suggests the value of constructing, rather than simply receiving, knowledge. In his opinion, “It’s easy to give a handout to memorize. But instead, [we] turn it into a question they have to research for themselves and convince people.” A 9th-grade teacher concurred, suggesting that the power behind student learning at Bronxdale is students building knowledge from specific cases, rather than encountering it in the abstract, which enables them to make it meaningful. The science research sequence, something rarely seen in high school science, animates this idea, helping students learn research strategies and learn how to read scholarly articles, and then supporting students to develop a question that they themselves will research (in some cases, alongside external experts).

In her own approach to creating engaging and well-supported inquiry lessons, Mary Zelenka described developing the whole first unit of her algebra course around problem-solving and unconventional questions: “problems like a checkerboard problem, nonroutine problems,” which she designed to help students “break habits from middle school”; that is, to help them see that math is not just about finding one right answer. As she attests, these activities “make a huge difference in how [students] approach problems” going forward. She then builds on those experiences, setting up an environment in which students are expected to drive the process in figuring out linear equations, for example. She may present them with a problem or dilemma and expect that they will work out their own process for solving it. As she continues to stress to her students, “There are a variety of ways to approach this: You could use operations, a table,” though she cautions that whatever method students use, they must write down their work. This allows her to track how students are thinking, how they are making meaning, to require of them an articulation of their thinking that leads to deeper understanding. It also enables Zelenka to expose problems of meaning-making so she can address them in real time, not just when they show up on a test as a wrong answer.

This, too, is a theme across classrooms: Teachers focus on what and how students are thinking and making meaning—or not, which makes perfect sense, given the school’s definition of inquiry-based learning. At Bronxdale, inquiry is not so much about finding the one “right” answer as it is about the process of figuring out, making sense, making meaning, and understanding nuance. With this outcome in mind, teachers create lessons that allow students to enhance their skills and habits of inquiry through engagement with a curriculum that treats issues that are meaningful in the real world around them and that matter enough to students for them to buy in to the process.



At Bronxdale, inquiry is not so much about finding the one “right” answer as it is about the process of figuring out, making sense, making meaning, and understanding nuance.

At the same time, the curriculum is grounded in rigorous disciplinary questions about how the natural and human-designed worlds are organized, change, and interrelate, as well as how people communicate about, within, and across such worlds. As the school website stated at the time of data collection, “These concepts help organize the content of the school curriculum to provide a relevant and cumulative framework for effective learning.”

Supporting students’ ability to assess and guide their own learning. An essential component of instruction at Bronxdale includes provision for students to learn how to guide and assess their own learning. Teachers support students in setting goals, making choices about their work, and learning from their efforts, all of which go toward helping students to participate in tasks with increasing independence and, ultimately, develop agency. Teachers use performance assessments and rubrics to measure student growth, and they do so in transparent ways that afford students familiarity with how they will be evaluated and, in many cases, involve students in assessing themselves.

For example, one teacher explained that in her class, when the students do projects, she gives them questions beforehand, spends time reflecting on the goal and tasks, and reviews the rubric with them so that students understand clearly what is being asked of them. This shared use of rubrics and assessment tools appears across many classes and serves to promote the habit of reflection as a tool for academic development.

As history teacher Julia Baskin told her students, “When we work hard, it’s important to take a step back and see what we did well and what we can grow in.” To help students develop this habit, Baskin provided them an opportunity to reflect on their Colonial New York research project, asking them to write down one thing they did well and one way they thought they could improve in each of four categories: (1) doing research and creating a strong final project to meet requirements; (2) working with their group and meeting deadlines; (3) presenting to the class; and (4) listening to other people’s presentations.

After giving students time to think and write, she asked them to start with “glows,” or positives about their performance across these areas. Baskin modeled the first “glow” herself, complimenting students’ presentation skills: “I was very impressed with how you came up [and presented] with confidence and knew your facts.” Once students had shared a few glows (“We researched well, so we could answer questions thoroughly”), Baskin asked them to come up with some “grows,” again modeling: “One thing I’d put out there as a grow would be organization—how information was organized, to help you.”

Chemistry teacher Geneal Chichester asserted that students in her class “constantly reflect on what they did, what worked and didn’t, [and] challenges.” Following a class in which students worked collaboratively to mix fake blood (a project devised to get students to create a mixture and see how the resulting substance changes when key variables are changed), Chichester held an opening circle discussion designed to help students reflect on their experience. The teacher had put together a handout that showed a table that contained self-assessment items accompanied by student responses. (See Figure 7.) Assessment items, listed along the top of the table, included understanding of assignment, challenges faced, assessment of teammate, assessment of self, and presentation takeaways. Under each of these headers, Chichester put student responses.

Figure 7
Self-Assessment Items for Opening Circle Discussion

2. Opening Circle Discussion Prompt

Directions: Read through the statements made in the self-assessment of the class. Circle 1 statement that resonates with you. *Think About: How can the same assignment lead to different experiences or understanding? Be Ready to Share.*

Understanding of Assignment	Challenges Faced	Assessment of Teammate	Assessment of Self	Presentation Takeaways
<p>“... make a presentation on a blood type that was being used in our project.”</p> <hr/> <p>“... the assignment was to learn how a mixture can be changed every time you add a different substance.”</p> <hr/> <p>“The presentation was to show the rest of the class and to introduce them to what we will be using it for in the movie.”</p> <hr/> <p>“IT ALSO SHOWED US THE IMPORTANCE OF MEASUREMENT AND WRITING DOWN YOUR PROCESS”</p> <hr/> <p>“This assignment’s main focus was presentation and collaborative skills.”</p>	<p>“Some challenges I faced was making the script intriguing and funny at the same time. Being creative with words I used and the scenarios I described was pretty difficult.”</p> <hr/> <p>“Some challenges I faced was having different ideas than the organizers....”</p> <hr/> <p>“I had no idea what had to be done and I was struggling with trying to see what fake blood looked better.”</p> <hr/> <p>The challenges faced were mainly developing a good fake blood recipe that mimics real human blood. Also, it was deciding what color scheme we wanted on the powerpoint.”</p>	<p>80- “Needed to speak more often and louder.”</p> <hr/> <p>85- “... a good leader and was effective at communicating which the team ... made sure that everyone knew the progress (they were) making on the slides.”</p> <hr/> <p>90- “... organized the slides but sometimes was off task around the classroom.”</p> <hr/> <p>90- “Worked well with group while presenting; had good tone and different approach towards presentation.”</p>	<p>85- “I should have spoken and explained the steps more while presenting.”</p> <hr/> <p>85- “I made an effective script that I believed had a good balance of informative information and fun and unique dialogue. I communicated with my team pretty well.”</p> <hr/> <p>90- “Got all of my work done and didn’t slow down team.”</p> <hr/> <p>75- “... could have done a better job on the slides and was more focused on what his other group members were doing.”</p>	<p>“I learned that to make the blood bumpy you can use both cornstarch and cocoa powder.”</p> <hr/> <p>“To get the perfect mixture it might take a lot of time and perfect measurements.”</p> <hr/> <p>“Tomato juice and starch wasn’t good for making darker blood.”</p> <hr/> <p>“Some physical properties counteract with the results of the level of viscosity in the fake blood.”</p>

The opening activity allowed students a minute to read through the responses and circle one that resonated with them, while thinking about “how can the same assignment lead to different experiences or understandings?” The teacher asked students to share the responses they chose, passing a globe among themselves as the “mic”:

“When we were demonstrating and talking, we got better at it.”

“You may not be able to replicate the results after several tries.”

“I had to think about how I was organizing [information to present].”

“We had to keep trying and trying.”

Chichester pushed her students, asking them how the assignment could lead to such different experiences and understandings. Students proposed a variety of ideas, from “not everybody has the same interest—people learn differently” to “some people don’t really like to work in groups.” After listening, Chichester reiterated her goal for the lesson, “for you to create a mixture, see how a substance changes [how different variables would affect the procedure of the lab and outcomes], and [have] a collaborative experience,” and explained what she liked about their assessments. She finished by asking students to write a summary about what they discovered about the experience of their peers during the fake blood assignment, and then gave them an opportunity to discuss some of what they had written. All of this was prelude to further discussion of the lesson inquiry question, “How can the physical properties of a mixture change based on the addition of substances?” In this case, assessment offered not only an opportunity to gauge academic mastery, but also to explore components of the process that enable students to achieve mastery, one of which is the habit of self-reflection.

Chichester also uses assessments to identify areas in which students need additional work and gives students a meaningful way of addressing them:

Instead of [giving students] test corrections, which I hate, I create homogeneous groups based on the strengths and weaknesses from the test. Students are assigned their weakest topic. Then they have to learn the topic to make up questions to teach it to the class. This becomes part of their reassessment. Many students get 100s in reassessment.

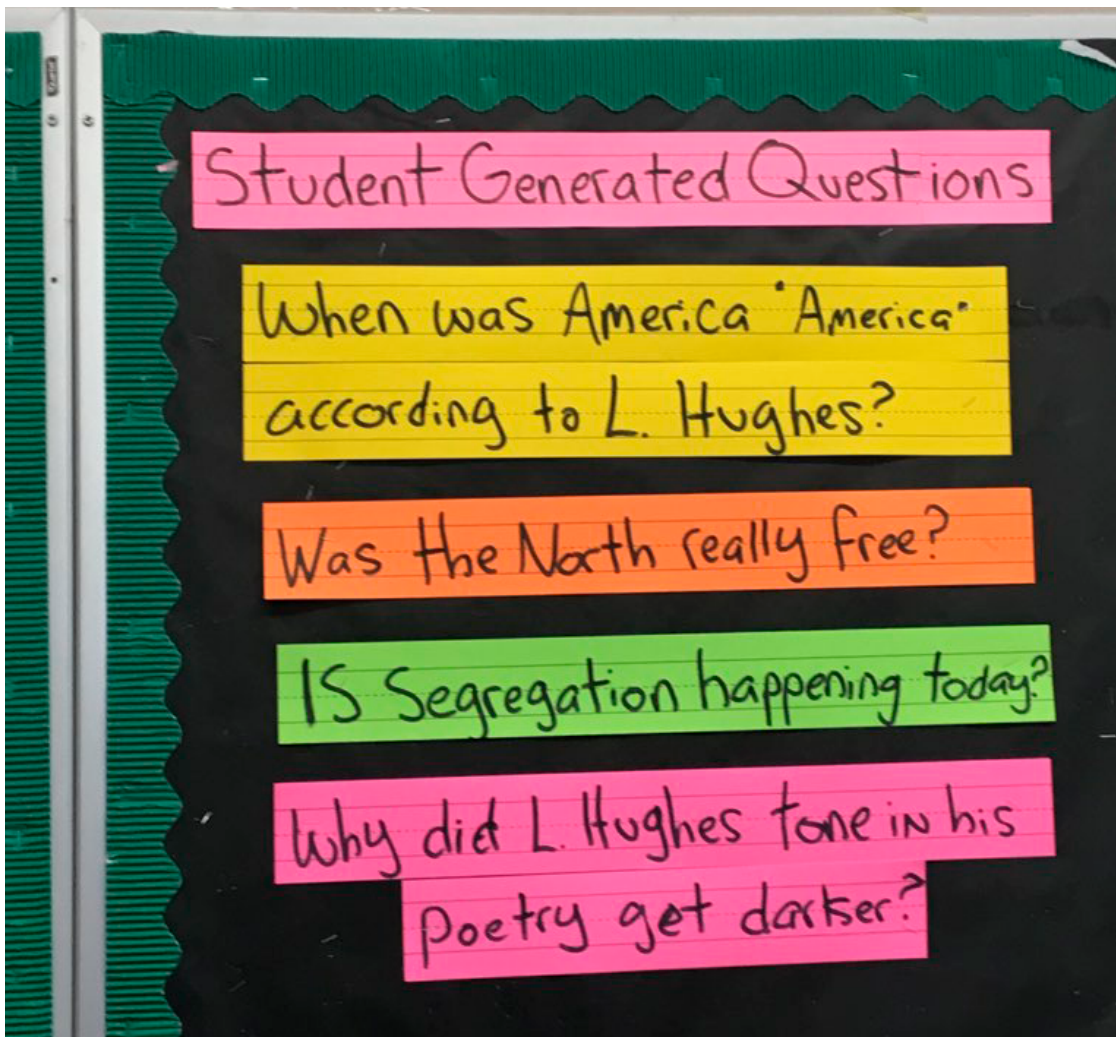
This approach, along with the inclination to develop students’ capacity for self-reflection, elevates the process of student thinking over simply providing the “right” answer. Mary Zelenka described how she repeatedly emphasizes process with her students, which helps to illuminate mistakes. She commented that they are constantly analyzing the common errors that appear on exit slips, for example, and raising the question “Why are we all doing this?”—drawing students’ attention to their thinking. The shift from “show your answer” to “share your thinking and reasoning” enables students to develop transferable skills of metacognition about their work, which in turn furthers deeper learning.

Building student agency. In accordance with the larger school goal of developing student agency, Bronxdale teachers have leaned on all of the strategies for supporting students in academic engagement that are described here in order also to elicit students’ voices and empower them to shape inquiry. Growing student agency, in turn, affords students the opportunity to take on tasks with increasing independence and ultimately to contribute to the development of an intellectual community. As Zelenka observed, Bronxdale is creating an environment that “allows students to

have a say in their education, and an active role.... [It's a] way to allow choice, ... creating questions that we answer together, exploring in depth something that you are interested in," with the result that students can be empowered in their learning and their lives.

Evidence of students' influence abounds across Bronxdale's classrooms. For one thing, students are inducted to leadership in academics just as in other areas of the school. One teacher described tapping two seniors to be models for younger students in her class. Two 9th-grade teachers pointed out that students participate as discussion directors and that teachers often rely on student-generated questions. The art teacher, for instance, uses an introductory lesson to springboard into inquiry-based discussions and describes having relied on student-generated questions to inform her teaching. (See Figure 8.)

Figure 8
Student-Generated Questions for Inquiry-Based Learning



The protocols that teachers use to help make students feel safe and to structure students' learning also work to empower students, giving them a safe forum in which to develop and direct their voices. It is a growth process, as one teacher commented: The teachers are pushing students more—they want them to ride carefully, but then to take off the training wheels, so to speak, and begin to take more control. The school honors students' interests by way of the capstone project, a performance-based assessment task that allows students to pursue a "passion project." Students also engage in science research that they develop based on their interests from as early as freshman year into a project that addresses meaningful, real-world issues about which students care deeply.

Incorporating social and emotional skills and habits. Another element of Bronxdale's approach involves embedding the development of social and emotional skills into students' academic experience, something that is organically woven through teachers' work to build community and implement inquiry-based instruction. These skills and habits include self-regulation, executive functioning (planning, focus, remembering instructions, and handling multiple tasks), emotional awareness, growth mindset, relationship skills, self-awareness, empathy, cooperation, and conflict resolution.⁵⁶

According to Principal Quintana, the kinds of intellectual experiences Bronxdale makes available to students require teachers to engage in:

... a lot of work around building trust ... to motivate students and develop their persistence and a work ethic. [Students] need to trust that this is important for them, their future, well-being, and career. Otherwise they will not endure the struggle. They need to trust to take the risks, fail, ask for help, and let us into their personal lives to help and provide outside resources.

The integration of social-emotional skills and what might be thought of as co-cognitive factors can help with that.

Many of the approaches teachers use at Bronxdale to build community and carry out inquiry-based teaching and learning also serve to cultivate students' social-emotional skills. For instance, teachers' strong organizational routines scaffold students' self-regulation and executive functioning. Some of those routines might include the "Do Now" that kicks off each class, the familiar posting of essential unit and lesson questions, the multiple reinforcements around how to interact appropriately in discussion and critique, and the explicit allotment of time for tasks (enforced with a timer). As chemistry teacher Geneal Chichester pointed out, the learning targets are all framed as "I can" statements, a subtle and regular reinforcement for students. Protocols help to routinize and structure academic tasks for students; as one of the 9th-grade teachers observed, once students master the protocols, "they are more easily able to access the skills and habits they need.... It makes it easier for them to focus and help each other." A 12th-grade teacher concurred: "What does this SCRAMS ask us to do? It helps them to facilitate each other."

Explicit teaching and scaffolding enable students to deconstruct complex intellectual tasks into doable parts. One teacher described her use of checklists, particularly in the case of challenging tasks: "I break down difficult tasks into checklists that help students get through the task [with a set of] questions." Helping students break down tasks into manageable pieces also helps them learn to plan and prioritize steps in order to complete a task.

All of the work that the school does to develop students' emotional awareness carries into and is built upon in the classroom. Thus, the direction and practice students are provided in giving and receiving feedback and accountable talk, for example, are rooted in the idea of emotional awareness and self-awareness and the idea that they are members of a community responsible for using appropriate and respectful ways of engaging other students. Students also learn to handle critiques of their work as the process of getting feedback is normalized and, ultimately, used toward revision and the development of persistence.

As Sean Garvey, a 12th-grade team leader, commented, "It speaks to the pro-social [when they are] working in groups or through peer editing.... That comes from each of the different grades being able to use accountable talk." Julie Maserof remarked that when students do critiques in her class, "They have a discussion about supportive versus nonsupportive language," and she reinforces being respectful and supportive of one another, modeling the behavior when she can. These skills form the bedrock for the kind of collaboration and cooperation teachers encourage in class, through group work as well as through peer feedback interactions.

As with the work of building community and executing inquiry-based instruction, teacher modeling helps give students images of what important metacognitive skills look like in practice. Thus, teachers model behavior related to growth mindset as they acknowledge their own mistakes, demonstrate persistence, and support students' revision of academic work. They model positive reinforcement, as when English teacher Maserof notices that several of her students have gone ahead in the book the class is reading together and says, "Ladies who are reading ahead, I love that you're reading, but let's stay together as a class." Instead of an admonishment, Maserof's statement becomes an acknowledgment of their skill, along with a reminder of the students' relationship to the whole class or community.

The many opportunities provided to students for reflection and self-assessment comprise another area in which teachers integrate a social-emotional component into academic learning. The "glows and grows" reflection in which students engaged in Julia Baskin's class, and the examination of self-assessments at the beginning of Chichester's chemistry class, offer good examples. Students are asked to examine their performance. As Chichester shared, "They look at solo practice in their work [and ask themselves]: 'Did I have trouble with deadlines? Other people?'" This is an important kind of self-awareness. But such assessments may also be used to help students connect with their own and their classmates' feelings about their work. In Chichester's chemistry class, for example, part of the reflection was devoted to helping students understand one another's experience so that they develop a tolerance for differences, which can affect their behavior in a group. Student responses included the following statements, a powerful testament to social-emotional learning:

Everyone has their own challenges and we are supposed to be there for each other.

I really like what M said. Some others might have the same challenges that he already faced—we can help each other.

When you work in a group you need to take other people's feelings into consideration—it's not all about you.

Such efforts to develop these metacognitive and self-reflection skills even encompass homework, which Chichester frames as a reflective activity that values students' experiences by giving a forum for their voice in such an assignment: "Homework asks for reflection on what they learned or didn't learn."

IV. Systems of Support

Schools that educate the whole child, such as Bronxdale, develop a range of systems of support to respond to student needs and address learning barriers. These include:

- access to integrated services that enable children’s healthy development;
- extended learning opportunities that nurture positive relationships, support enrichment and mastery learning, and close achievement gaps; and
- multi-tiered systems of academic, health, and social supports to address learning barriers both in and out of the classroom.

We have described many of the ways that the school supports learning for diverse students and seeks to reduce their stress and anxiety. A key aspect of creating a supportive environment is a shared developmental framework among all of the adults in the school, coupled with procedures for ensuring that students receive additional help for social, emotional, or academic needs without cumbersome procedures standing in the way. In addition to the many practices to create physical and psychological safety within classrooms, Bronxdale has developed, within its multi-tiered system of support, specific programs and interventions that address the situations of students who experience adversity and trauma.

In addition to the many practices to create physical and psychological safety within classrooms, Bronxdale has developed, within its multi-tiered system of support, specific programs and interventions that address the situations of students who experience adversity and trauma.

Everyone experiences the foundation of this system, with teaching strategies grounded in universal designs for learning that are broadly successful with children who learn in different ways, as well as use of explicit social-emotional learning models and positive behavioral support strategies that are culturally and linguistically competent.³⁷ This foundation is strengthened by the fact that all teachers have had training both in project-based learning that offers strong scaffolds and multiple entryways into the problems, and in collaborative problem-solving, which helps them learn how to talk to students when an academic or behavioral issue comes up.

Teachers have opportunities to discuss students’ needs with other teachers in their common planning and faculty meeting time, so that they can learn productive approaches and gain supports. They have learned how to listen and look carefully to understand what students need, and to follow up when there are signs that students may be coming to school hungry, angry, without homework, without proper clothing, or demonstrating other needs. Students learn that they can express their needs without fear of stigma, and that adults will work to find ways to meet those needs.

A school social worker and counselor are at the ready to support teachers in meeting nonacademic needs, from food, a backpack, or clean clothing to family outreach or counseling supports. Students may be invited to join a circle group that is working on restorative practices or a counseling group to work on grief as needs are identified.

And as academic needs are identified, the principal and staff look for ways to meet them. For example, when it was clear that many students' learning was impeded due to their poor reading and writing skills, a literacy coach was hired to provide direct support to both teachers and students in classrooms so that students with literacy needs would receive attention and classroom pedagogies could increasingly support literacy instruction. A wide range of texts were made available to students so that they can read at their level and develop fluency while they are getting support to extend their skills.

Additional supports are available for those placed at risk or who need some particular additional support. The risk may be demonstrated by behavior (e.g., number of absences) or due to having experienced a known risk factor (e.g., the loss of a relative, an eviction, or other traumatic event). Supports may include academic supports (e.g., access to the Read 180 program, mathematics tutoring, extended learning time) or family outreach, counseling, and behavioral supports. The school operates counseling groups to support students who have experienced loss, violence, or other traumatic events and those who need to learn to manage conflict and anger.

In the multi-tiered system of support, students do not need to undergo a bureaucratic process of securing an IEP in order to receive the help they need when they need it. Among the supports routinely offered by the school are the following:

- help from teachers in a resource room and during lunchtime or after school—ranging from content area supports to writing support or learning strategies;
- tutoring from teachers after school and in the Saturday academy;
- support from a special education teacher, paraprofessional, or student teacher in a co-taught inclusion classroom regardless of special education status (sometimes purposefully planned for students who have unidentified learning needs);
- a computer lab with supports for students who do not have access to technology at home; and
- mentoring from teachers or other staff for students who are “on the cusp” of potential failure.

In this student-responsive school, the staff is continually attending to what students need and how they can help meet those needs, even if that involves resources outside of the school. For example, the staff realized that over school breaks many students did not have access to a range of services that school offers: people to support them, food, activities, heat, books, and computers. So they compiled a list of places where students could spend time during the breaks that would provide these things.

Through a partnership with Montefiore Hospital, which offers medical services to students in all the small schools in the large building that houses Bronxdale, students can gain access to dental and health services. Montefiore health aides also offer health classes in advisories, including reproductive health information and referrals to counseling. Recently designated as a community school, Bronxdale can also now offer free glasses to students who need them, along with other supports.

Intensive interventions are also available for students at particularly high levels of risk, including one-on-one health and mental health supports and effective special education. Where needs extend beyond the school's capacity, Montefiore counselors and social workers can step in to help students—and sometimes their families—access supports and services.

V. Professional Learning in a Community of Practice

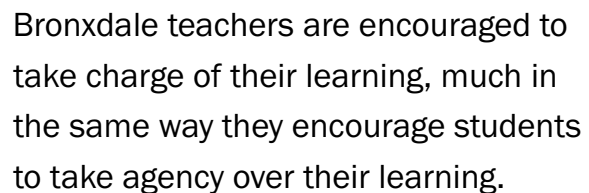
How does a school achieve such collective knowledge and practice, so that teachers are able to tailor their pedagogy to how students learn best? In Bronxdale’s case, the school has created a community of practice: Faculty come together regularly in different configurations to learn, much in the way that students learn—through inquiry, collaboration, and self-reflection—with students at the center of their inquiry.

Creating this community of practice at Bronxdale relies on several central beliefs about teachers and their learning. First, and perhaps most essentially, teachers at Bronxdale are invested with a powerful level of trust. They are trusted to take charge of their learning and, in some cases, to be the experts, responsible for sharing their expertise with colleagues. Because faculty members are recognized as empowered agents, teacher learning consists of more than the delivery of professional development; it also involves the active examination of self and practice, in the belief that self-knowledge on the part of teachers will lead to instructional improvement. A related implicit conviction suggests that teachers’ self-knowledge lays the groundwork for them to better understand and appreciate their students’ identities and backgrounds.

Second, collaboration—work with and within the community—is critical to this process. Faculty learning is enriched and supported because it occurs within a community made up of peers and external partners. Finally, the process of inquiry in which staff members engage is ongoing. The school and the practices that define it are continually evolving as the collective knowledge of the adult stakeholders evolves.

Trust in Faculty as Learners and Leaders

Bronxdale teachers are encouraged to take charge of their learning, much in the same way they encourage students to take agency over their learning. Teacher learning is not the piling on of pedagogical strategies, but the examination of self, one’s practice, and personal goals for improvement. As both teachers and learners, faculty problematize their own classroom teaching experiences with Bronxdale students to inquire into students’ learning and responses so that they understand how their students learn best. These inquiries help them figure out, individually and collectively, the routines, teaching strategies, and solutions that constitute the best ways to teach their students.



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One avenue through which this occurs is self-study. Teachers are supported to pursue self-study and integrate their learning into their pedagogy. Ninth-grade special education teacher Caitlin O’Loughlin explained that she sees herself as a researcher as well as a teacher, so she read widely about what different educators think is best practice. She then figured out how to adapt particular practices to the needs of her classes and has shared these practices with her community. Principal Quintana has funded staff participation in professional development that individually interests them. Even when some have returned to tell her that they “got nothing out of it,” Quintana persists.

It is her goal to sustain excitement about learning—individual learning and the community’s learning—and she understands the relationship that exists between supporting teachers in the ways that they learn best and expecting teachers to teach in the way students learn best.

Quintana also provides release time for peer learning encounters, in which teachers who have expertise can share it with colleagues, one on one. Often these expert teachers have leadership positions, such as instructional specialist, grade team leader, or department leader, and together form a web of support for novice or struggling teachers. When Quintana noticed that some teachers struggled to facilitate student discussion, she asked two teachers who are experts in the technique to design professional development for those colleagues. This collegial collaboration led to a conversation about making these teachers’ expertise and their discussion resources more widely available to the entire staff and also sparked the possibility of spiraling this teaching of discussion across the grades.

Faculty participate in after-school meetings at which, according to Chichester, “Teachers get feedback from peers on lessons. We use tuning protocols to focus on particular challenges teachers are facing.” Teachers are predisposed to give and take feedback from peers because they have developed a network of relationships through opportunities for participating in activities other than teaching, which bring them together as collaborators on school policy and problem-solving. Additionally, work with coaches individually and in departments, where there is a back-and-forth about teaching, builds teachers’ capacity and skill for giving and receiving feedback.

Co-teaching also provides opportunities for teachers to develop their capacity to teach in ways that Bronxdale students learn best. For example, one teacher said that he learned from his partner, a special education teacher, how “to teach the students who struggled ... how to break things down and differentiate for students who struggle.” In turn, his partner noticed that “he pushed students much more than” she did. Being able to closely observe a colleague’s teaching in action on a regular basis enables teachers to see critical details and nuances of practice. Such close and regular observation can foster a clear understanding of the details that make particular teaching practices effective and increase the likelihood of faithful and successful replication.

In another example of peer-to-peer learning in which some faculty members share their expertise with others, the restorative deans introduce, model, and suggest how to use circles in advisory and subject-area classes. They engage in conversations to generate teachers’ thinking about what behavioral support techniques or tactics they could use to avoid crisis or violence in their classrooms. In this case, these professional learning experiences emphasize that the way for teachers to correct undesirable behavior is to help students see that they have other choices. In one case, for instance, guidance counselor Nick Boyiatzis led a session on trauma—“how stress, violence, racism, and oppression affects our kids. Our kids come to school with all of this stuff. I asked, ‘How are we going to combat this?’ One teacher said, ‘We can’t change the outside. We can change the school culture to make school a model of equity and safety, with adults who care.’ In this way, we are taking one step to help kids combat this stuff.”

These interactions are designed to move staff from a traditional punitive mindset to a restorative-repair mindset, underscoring the idea that the school is a community and generating investment in that community. Restorative Dean Flores commented that such interactions “help teachers who

don't share socioeconomic realities or cultural backgrounds of students" connect with them and "see gaps in how the curriculum is received." Thus, peers enable peers to change their thinking about their students and the strategies they can use to support students.

Border Crossers offers another opportunity for this work, drawing on outside rather than internal expertise. At the sessions for this schoolwide initiative, faculty explored issues of race and racism in a safe and respectful environment, allowing teachers to reflect on their own beliefs and backgrounds, as a first step to better understanding their students' identities and lives. Inevitably, implications for teaching arise, such as culturally responsive pedagogy. In these ways, Bronxdale evidences its animating beliefs that teachers taking responsibility for their and their colleagues' learning, and deeper self-understanding that leads to deeper understanding of students, will change instruction for the better.

Collaboration and Community

Professional learning and planning

Quintana asserts, "Problems don't get solved privately behind closed doors [but through] community collaboration. No one person is seen as the only one who can solve a problem. [Bronxdale] structures, such as teams, and practices make and allow everyone to be responsible." In other words, structures and practices for collaboration and community produce collective responsibility and internal accountability for learning, knowledge building, and problem-solving; this in turn enables teachers to teach in the ways that Bronxdale students learn best. As science teacher Geneal Chichester commented, "Teacher collaboration supports the school culture."

Bronxdale hosts a wide variety of configurations for convening its community of practice, including schoolwide professional development initiatives, summer institutes, grade-level team meetings, content area department meetings, specialized committees such as the Student Support Team (SST), different types of coaching, release time planning for teachers, curriculum retreats, inter-class visitation, inter-school visitation, coaching, peer-to-peer learning and feedback, co-teaching, and new teacher workshops. As established earlier, the faculty community in these convenings acts as a source as well as recipient of learning.

The faculty, for example, has pursued the development of both a sense of agency and a growth mindset in students as a collaborative schoolwide initiative. During their summer institute, they reflected on student experiences and perspectives that would need attention as they developed strategies toward these goals. For example, as a warm-up, the facilitating teacher, Sean Garvey, asked the team to write down on a Post-it their responses to the question "What does it feel like when you belong somewhere?" After a few minutes of reflection, the teachers began sharing out responses: "Safe." "Reassuring." "Empowering." "Willing to take risks." "Vulnerability doesn't feel so scary." "More willing to get out of comfort zone." "Feel more open to say things." Garvey then connected the idea of belonging to the efforts to create student agency and efficacy: "When we talk about creating student agency, what has to be there is this sense of belonging. To be willing to be malleable and willing to grow, you need to feel like you belong. We need to remember this."

Another insight, based on a session teachers had attended that examined how trauma impacts learning, was the importance of creating safety and self-knowledge as conditions for agency. Principal Quintana noted, “It’s the option paradox—choices can lead to frustration. If you don’t know who you are, or if you are afraid of failure, choices can make you anxious.... [We need to allow students] to know who they are to help them choose.”

Collectively and in departments, as teachers built knowledge of growth mindset and examined their own and students’ mindsets, they devised new perspectives on and strategies for their teaching. Together, they constructed 6- and 12-month timelines for implementing practices and demonstrating outcomes they wanted the initiative to produce, along with their aspirations for what the school, teachers, and students would be doing 3 years and 5 years out. (See Figure 9.)

Figure 9

Objectives for Implementing Growth Mindset Practices

6 months?

- Use growth mindset in the classroom
- More opportunities for student choice in day-to-day activities
- More choice in assessments
- More feedback, reflection, and revision in all classes; more student-generated assessments

1 year?

- Changed grading systems to be more mastery-oriented; some student voice in curriculum; two or three completely student-led clubs and events
- Electives are student-proposed and curated
- Growth mindset taught in classes
- Teachers allowing students to have choice and students becoming comfortable with the idea
- Ownership of school culture and “discipline” agency w/a reinvigorated youth court and student-run restorative circles

3 years?

- Portfolio-structured curriculum throughout school
- Performance Assessment Consortium membership
- Original staff will move on; need to establish strong “feeder” systems
- Student-created curriculum maps
- Half-year student internships in an area of interest
- Portfolio-based arts classes with pre-req courses and digital arts/media program
- Freshman classes introduce students to multiple assessments and by end of year have introduced student choice in assessment
- Junior and senior classes have mostly student-generated questions, assessments, and pacing

5 Years?

- Super awesome amazing social justice-focused learning
- Students choose what skills they want to learn first; can go by units
- Complete technology-led classrooms created by students
- Student-run community events
- Students are able to work independently on what they want to learn
- Current and former students are at the forefront of helping staff develop and implement strategies that enhance all aspects of student functioning

Source: LPI observation of a professional development session.

An important aspect of the ensuing conversation was teachers' realizations that, in starting these changes, they, too, struggled with a fixed mindset and needed to develop a sense of agency. After looking at the plans, one of the teachers shared her biggest wonder:

We get so amped here at ISA [Institute for Student Achievement]: Every lesson plan is awesome until it encounters students. How do we do this at a level that feels like we are giving staff autonomy and feel empowered and not overwhelmed? Like our kids, if we feel we have too much choice, [it becomes] 'screw this, it's too much.' Where do we begin? What do we already do? What shifts begin now with our teams that allow us to empower teammates?

Another teacher built on these sentiments:

Why haven't we gotten those things running—i.e., social justice learning? [It is our] reluctance that has held us back. Fixed mindset. We only learn by trying, even if we fall on our face. It's exciting now, but how are we going to do it when we face challenges with students or our own fears?

Principal Quintana responded:

That's why the 6-month marker is so important. [It makes us ask] what can we start with, the little stuff? Those are things we can already start to do.... [The idea that there is] not enough time is part of the fixed mindset. If you already say there isn't, you won't do it. The 9th-grade curriculum: We'll start there. We have to be willing to build it in. What is the first step? That's why the 6-month piece is important. [It helps to get us to the question of] "Where can I start?"

Acknowledging that they were talking as much about teacher agency as they were about student agency, the principal posed guiding questions for the next segment of discussion: What does an instructional focus for Bronxdale look like as we're trying to focus on increasing student agency? How do department teams support that work? How does the SST work? How do grade teams support that work? The participants broke up into teams to tackle the questions.

In our case study, we saw many of the fruits of this collaborative work. For example, concluding that students demonstrated a risk-averse mindset when it came to challenging problems, teachers worked with ISA coaches and their departments to develop strategies to normalize and celebrate mistake-making, risk-taking, and struggle as opportunities for learning that many students otherwise eschew. Within 6 months, classrooms across content areas increasingly featured posters on walls celebrating and articulating the benefits of effort, struggle, and mistake-making. In a 9th-grade English language arts class, a wall-mounted chart documented student-identified teacher mistakes, along with student-generated corrections. Other evidence included messages about resilience and the power of confronting obstacles, as well as many opportunities in classrooms to revise and improve work, and thus to see how additional effort can lead to greater competence, supporting a growth mindset.

Team-based problem-solving

Grade-level team meetings function as micro-communities to produce change in policy and practice. For instance, one of Bronxdale’s priorities for the coming year was cross-grade team consistency in the use of particular protocols. Consequently, at the first 2017 9th-grade team meeting, Caitlin O’Loughlin, the 9th-grade team leader and United Federation of Teachers Bronxdale chapter leader, explained that the team would “review old protocols [to] see if we want them or new ones.” O’Loughlin said, “Your opinion matters, so speak up.” Seated around a large table in one of their classrooms, the 9th-grade team, composed of 13 teachers from different disciplines, discussed some students’ frustration with “wanting to know why they are doing something” and the need to “bring that purpose to the beginning of the activity.”

Teachers already implementing effective strategies to address this issue shared what they do. One suggested, “Make targets visible and clear so kids know what to do.” Another offered the routine of “hav[ing] the learning target on your board every day.” When another asked, “Why is this important? The learning target doesn’t necessarily change every day,” a colleague responded, “It tells the point of the lesson.” One staff member suggested that O’Loughlin and a colleague (who is a model teacher) could help teachers write learning targets. Eventually, the team reached consensus to post daily learning targets and use them to inform students of the lesson’s purpose. Other “non-negotiables” to which they agreed include routines for daily visible posting of the agenda, essential question, and unit question. They also discussed students’ challenges in engaging with texts in the various content areas and agreed to use an annotation protocol daily to help “students interact with texts every day.” Team leaders then met with the school leadership team, which includes the principal, to review grade team decisions. Visiting the school several months later, we observed that the 9th-grade team’s agreed-upon items were visibly posted on the board in each classroom, and teachers repeatedly made reference to the learning target to reinforce students’ understanding of what they were supposed to be learning that period.

In another example of how practices change in the context of the instructional community, the 9th-grade team addressed the unintentional consequences of their homework policy. Students had become aware that in the existing policy, homework comprised only 10% of their grade, which inadvertently allowed them to pass their courses without ever submitting homework. The 9th-grade team debated where to locate the responsibility for enacting a solution: within the content area class or advisory. They settled on advisory, in which students earned a “professionalism” grade based on the criteria of being on time, completion of classwork, and completion of homework. The notion of professionalism in this context refers to contributions to group discussion, helping others, and making the classroom a positive space for oneself and others.

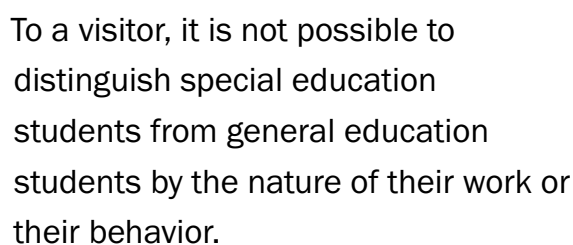
Team members reasoned that addressing the homework policy in advisory would avoid requiring each content area teacher to take on another responsibility and would be more likely to ensure coherence and continuity in implementation. Team members debated a variety of strategies, including creating incentives and strategies for homework submission, setting a routine for homework submission on particular days of the week, and teaching students how to access homework assignments on the school website. Different team members expressed doubt or opposition to several of the strategies on various grounds, such as their complexity, rigidity, or the conflicts they might pose with existing successful strategies or effective routines. Strategies eliciting opposition were dropped.

Finally, the team came to consensus on two of the suggested strategies: (1) incorporating homework into a professionalism grade, in which homework and classwork would be combined to count for 40% of a student’s grade, and (2) teaching students how to access homework assignments online, increasing their opportunities to submit their work on time. While implementing the new practices, the team members planned to monitor results and revisit the policy’s effectiveness at subsequent meetings. Even though only two proposed solutions elicited consensus, the restorative practice value of emphasizing learning over punishment remained predominant, as did the value of “teaching the way students’ learn”; i.e., designing solutions that work for the students and discarding practices that do not work to achieve the desired ends.

Notably, the 9th-grade team used the occasion of students’ undesirable behavior as an opportunity to teach professionalism—an approach that has real-world implications and benefits for them—rather than set up a punishment strategy. Their solution, while driven by pragmatism, demonstrates how deeply embedded the values of the school vision are and how Bronxdale’s multi-tiered system of support, based on a shared developmental framework, operates.

Work with external partners

At the time of our observations, five ISA coaches had worked with teachers in the major content areas of English, math, science, and social studies, as well as in special education, where the coach supported teachers in learning how to seamlessly integrate special education students into general education classes. At Bronxdale, special education students—including autistic students—are



To a visitor, it is not possible to distinguish special education students from general education students by the nature of their work or their behavior.

fully integrated into mainstream classrooms. In classes co-taught by a special education teacher and a general education teacher, all students engage in the same tasks and use the same protocols for class discussions. To a visitor, it is not possible to distinguish special education students from general education students by the nature of their work or their behavior.

Principal Quintana makes full-day release time available for individual teachers to co-plan with their coach. This time has been used by some of the Bronxdale science teachers and their ISA science coach to create and co-plan a 3-year science research sequence of courses for students of all abilities. In addition to release time, teachers in all content areas use their prep time to work with coaches on inquiry instruction, a model that reinforces teacher voice and responsibility in determining how to teach in the ways that Bronxdale students learn best.

Often coaches and teachers co-plan, engage in debriefing and feedback sessions following a coach’s classroom observation, and collaboratively problem-solve dilemmas of practice the teachers may be confronting. Several teachers across disciplines attributed their capacity to use inquiry to their collaboration with their coach. The coaching emphasizes dialogue, collaboration, and co-construction of customized solutions targeted to particular outcomes that range from classroom management to inquiry instruction, rather than dissemination of prepackaged strategies that teachers are expected to implement with unquestioned fidelity. Thus, the coaching experience

reinforces the importance of teacher agency in professional development and underscores the responsibility entrusted to teachers to hold themselves accountable for the practices they implement.

Other external education partners beyond ISA have provided speakers to discuss, for example, the history and role of restorative practices in relation to the school-to-prison pipeline; to help design the Peer Group Connection (PGC) program; to facilitate the development and redevelopment of advisory; and to work directly with students to increase college-going and enrollment. Bronxdale has taken advantage of the New York City Department of Education professional development opportunities and resources to build its community of practice. Restorative Dean Restrepo mentioned Bronxdale's use of the Department of Education's offering for staff to learn resources such as Stuart Ablon's Think:Kids approach to collaborative problem-solving for students in emotional crisis in school and strategies to help students de-escalate and self-regulate.³⁸ In addition, Quintana mentioned the Great Books Foundation's professional development, made available by the Department of Education, which provided a curricular framework for some English language arts classes.

VI. Lessons Learned

The case of Bronxdale High School has important lessons to offer the field, though these lessons do not come in any kind of easy-to-implement “package.” Instead, Bronxdale presents a set of principles and ideas, as well as the outcomes they are designed to achieve, that its stakeholders have developed through the interplay of beliefs and action (on-the-ground practice) in the context of its particular staff, teachers, students, and community. The careful attention Bronxdale pays to this interplay among beliefs, action, and context powers stakeholders’ commitment to and engagement in continuous learning, improvement, and change. Here, we share some of these grounding principles and their implications for policy.

Perhaps most centrally, Bronxdale is guided by a **clear vision** of what the school wants its students to be. This vision is generated collectively by staff and serves as the driving force for the goals they set, strategies they choose, and decisions they make for getting there. As a second key component, the Bronxdale staff identified the development of the school into a **safe, caring, collaborative community** as a necessary condition for realizing their vision. Indeed, Bronxdale’s theory of action suggests that remaking the school into a caring community will ultimately elicit those student and teacher behaviors that will produce the desired outcomes.

Perhaps most centrally, Bronxdale is guided by a **clear vision** of what the school wants its students to be. This vision is generated collectively by staff and serves as the driving force for the goals they set, strategies they choose, and decisions they make for getting there.

Accordingly, the school has leveraged its autonomy to secure and organize its **resources** (including human resources) to support the creation of such a community, which rests on the centrality of relationships: close, caring staff–student and student–student relationships, but also collegial, collaborative relationships among staff. The cultivation of these kinds of relationships is, again, not something that can be easily plugged in or “implemented.” It relies on the adults in the school having built an interrelated set of beliefs and dispositions—that is, the willingness and active interest in knowing students well. Teachers see these relational connections to students as an integral component of their teaching identity, something they must leverage in order to achieve the school’s vision.

Additional shared beliefs that anchor Bronxdale’s caring relationships include the assumptions that students’ behavior is a function of knowledge and capacity, not a character trait; that students are rich in potential and worthy of the staff’s efforts; and that social injustice regularly and adversely affects students. On the basis of these beliefs and the deep commitment to creating a safe and caring community, staff have concluded that academic success depends on taking care of students’ social-emotional needs in the context of both students’ academic learning and their social life in the school. Thus the school has adopted an integrated approach to implementing **educative**

and restorative practices; social, emotional, and metacognitive learning; culturally responsive pedagogy; and customized scaffolding that facilitates the risk-taking required for deeper learning in academic classes.

The school reinforces its commitment to community and relationships through its organizational structure, which is designed to promote **collaboration**. Collaboration operationalizes a fundamental principle about **collective responsibility**; to reiterate Principal Quintana’s observation, “Problems don’t get solved privately behind closed doors [but through] community collaboration. No one person is seen as the only one who can solve a problem. [Bronxdale] structures, such as teams, and practices make and allow everyone to be responsible.” Staff collectively problem-solve in multiple venues—grade-level teams, subject-area teams, leadership teams, co-teaching teams, committees, whole-staff professional development sessions and institutes, etc.—that offer opportunities for them to get to know one another, express their opinions, and work together. What is happening at the school can be made public. As two teachers commented, at Bronxdale it is okay to talk about problems, which is not necessarily the case in other schools.

Another critical lesson is the school’s commitment to “teaching the way students learn best” so they can achieve the vision of what a Bronxdale graduate should be. “How students learn best” privileges the schoolwide practice of **well-scaffolded inquiry pedagogy**, ensuring students’ access to deeper learning and encouraging high teacher expectations for students. “How students learn best” also keeps students at the center of instructional decisions by encouraging teachers to reflect on whether and how their strategies are moving students toward desired outcomes.

The role accorded to faculty is another important lesson from Bronxdale’s experiences. Change emerges from the inside out, in response to a felt need for continuous improvement, instead of being imposed from the outside in. As a result, adults in the school are entrusted with the collective responsibility to enact changes needed to move the school closer to the realization of its vision and mission. The high level of trust placed in staff to do this, and the investment that the principal willingly makes in **faculty support and learning**, is a distinguishing feature of the school’s progress. Steady improvements in climate, culture, learning, and outcomes over the last 5 years have been a result of investments in staff learning both from each other and from other educators who have designed successful schools and programs that incorporate theory and practice regarding strategies for social, emotional, cognitive, and academic development, as well as positive identity development.

The principal is able to do this in part because the New York City Department of Education affords school leaders autonomy in selecting staff and deploying their resources. Thus, Quintana may hire faculty predisposed to Bronxdale’s culture and spend resources on faculty development, just as she can invest in the restorative staff that make the creation of the caring community possible.

The meaningful progress Bronxdale is making is also captured and encouraged by New York City’s accountability system, which takes account of critical indicators such as 4-year and 6-year graduation rates; college-going and persistence rates; and school climate indicators related to rigorous instruction, high expectations for students, teacher collaboration, supportive environment, family–community ties, and trust, along with traditional test scores. These attributes of the policy environment are helpful to Bronxdale’s restorative approach. Equally important for these kinds

of practices is a regulatory environment in which school practitioners are trusted and given the flexibility and resources to exercise their judgment, while being supported in finding ways to achieve the outcomes their community aspires to.

Although Bronxdale has created many of the aspects of a supportive school environment, staff believe that a more fully developed performance assessment system for graduation, such as the graduation portfolio used by the several dozen schools that belong to the New York Performance Standards Consortium, would more accurately assess what their students know and can do—and help them develop stronger critical thinking and performance abilities. They believe such a system would allow them to expand and intensify the deep project work exemplified by the capstone project, which engages students in the ways they learn best. This is a next step for both the school and the system, which allows some schools to undertake these pioneering approaches through a waiver but does not yet encourage this kind of opportunity for all students. In the end, building a school to support the many aspects of how diverse young people learn best requires both on-the-ground investments in practice and supportive policy frameworks.

Appendix A: Study Methods

This one-site case study investigated how high schools can create a culture where students are encouraged to have a sense of belonging, engage in deeper learning, develop socially and emotionally, participate in restorative practices, and graduate and get accepted to colleges at high rates. The goal of the study is to help practitioners and policymakers understand how such a culture can be created and sustained so that more schools attain these achievements. To this end, this investigation sought to answer the following questions:

1. What does a prosocial and pro-academic school culture/climate look like?
 - a. What are features of such a culture?
 - b. What student behaviors are associated with such environments?
 - c. How does a prosocial and pro-academic culture contribute to achieving desired student outcomes (graduation rates, attendance rates, academic achievement, enrollment in postsecondary training for career and/or college)?
2. How do the school's philosophy, leadership, structures (organizational and instructional), policies, and practices contribute to/support a prosocial and pro-academic school culture and student behaviors?
 - a. How is students' social-emotional development supported?
 - b. What is the relationship between student engagement with deeper, meaningful learning and students' development of social-emotional attitudes and skills?
 - c. What impact does student engagement in deeper, meaningful learning have on the development and sustainability of pro-academic school culture?
 - d. How does a prosocial, pro-academic school culture/climate support students to feel a sense of social and academic belonging, to engage with a curriculum focused on higher-order thinking, and to persist through personal and academic obstacles?
 - e. What policies, practices, supports, and mechanisms are in place to reduce student marginalization and exclusion and to resolve interpersonal and/or school conflicts?
3. How did the school's philosophy, policies, and practices toward a prosocial and pro-academic culture develop/evolve over time? What factors influenced these developments? What factors created challenges to these developments?
4. How did/do the school's philosophy, policies, and practices take into account/respond to the larger social/political/economic context of the community the school serves?

Because the study sought to surface best practices related to creating a prosocial, pro-academic culture, researchers used purposeful sampling to identify schools that could be “information-rich cases.”³⁹ Rather than designing a study that could provide generalizable findings, the research team sought to learn from a school that has demonstrated exemplary success in creating a prosocial and pro-academic culture, particularly among students who face adverse circumstances. Identifying the structures, practices, and cultural features that have facilitated the success of this exemplar case can provide insights into factors that can enable these types of supportive, whole child cultures to take hold, thereby highlighting lessons that can inform policy and practice.

Bronxdale High School is an example of an information-rich case, and thus was selected as the focal high school for this investigation. The school, while being a high-poverty, high-minority high school, is known for its restorative discipline practices, low suspension rate, and strong academic program and results. Bronxdale has implemented many practices that support social-emotional learning and a prosocial, pro-academic culture, increasing students' opportunities to succeed. (See the "Origins and Context" section for the school's data.) Furthermore, the school's policies and practices align with the emerging evidence from the science of learning and development and the National Commission on Social, Emotional, and Academic Development about how to best educate the whole child.

To answer the study's research questions, a four-person research team engaged in an in-depth, case study approach. Case studies allow researchers to investigate real-life phenomena in context, thus generating understandings of a phenomenon and its interplay with its environment.⁴⁰ This design is also best suited to studying phenomena that require an analysis of multiple sources of data and when the researcher has little or no control over what is studied.⁴¹ With its sensitivity to context and its ability to capture a multitude of processes, a case study approach was an appropriate and ideal method to elucidate the dynamic and complex ways that the schools instantiate and disseminate their practices.

Data Collection

Data was collected from June 2017 to May 2018. Primary data sources for this study include interviews, observations, documents, and databases.

Interviews

The research team interviewed 34 key stakeholders, including the principal, administrators, teachers, students, deans, and counselors, at Bronxdale High School. (See Table A1.) Interviews were conducted in multiple rounds. For the initial wave of interviews, the school's leadership organized for the research team individual and group sessions with school personnel and students who could speak to the school's current and evolving instructional and disciplinary practices, as well as share reflections about their experiences at the school. After this first set of interviews, researchers used snowball sampling⁴² to identify additional study participants, asking school leaders to connect the team to additional teachers, counselors, and students who could fill in knowledge gaps and further address the study's research questions. This strategy used the knowledge and experience of the school's leadership to identify respondents who could best speak to systems, practices, and structures that the school develops and implements to create a prosocial, pro-academic culture that integrates the tenets of restorative justice and is grounded in the idea of school as a caring community committed to teaching the way its students learn best.

Interviews and focus groups were semi-structured and lasted 45–60 minutes. Interview prompts asked participants to describe the school's key pedagogical and discipline practices; its staff onboarding and professional development processes; its approach to supporting students socially, emotionally, and academically; and its restorative justice practices. Interviewees were also asked to discuss challenges that have emerged in the development and implementation of the identified pedagogical and discipline practices. At times, the researchers tailored the protocol based on the role of the interviewee, tenure with the school, and classroom observations made. This differentiation ensured that particular questions could be explored in more depth with the respondents who were most likely to have relevant knowledge on the topic. Notes were manually taken for each interview.

Table A1
Study Interviewees

Role	Number
Principal and Administrators	3
Teachers and Teacher Leaders	10
Counselors and Deans	4
Students	17

Observations

Observations made up the second primary data source. The research teams attended two professional development sessions, one of which was a multi-day institute. The event was the annual Summer Institute sponsored by the Institute for Student Achievement, a network of schools of which Bronxdale is a member. The other event was a mandatory, all-day professional development session at the beginning of the school year that was facilitated by Bronxdale’s principal. Attendance at these events provided insight into the school’s approach to professional development and creating a prosocial, pro-academic culture and allowed researchers to triangulate data retrieved from interviews and documents on the school’s professional learning supports and intentional culture-building efforts.

The four-person team also conducted site visits to the school during the school year to observe practices and to interview school leaders, teachers, and students in situ. (See Table A2 for observations and site visit information.) Visiting the school and different classes during the school day allowed researchers to garner a range of perspectives and insights from individuals who varied in their affiliation with the school and/or familiarity with its prosocial, pro-academic culture. These visits were not intended to provide generalizable evidence about Bronxdale’s approach, but rather to observe different aspects of the school’s approach and the ways in which students, teachers, and school leaders understood and experienced them.

Table A2
Observation and Site Visit Information

Date of Visit	Observations Made
June 29–30, 2017	<i>Professional Development:</i> Institute for Student Achievement Summer Institute
July 17, 2017	<i>Culture Building and Student Support Observations:</i> Incoming freshmen Summer Bridge Program
September 5, 2017	<i>Professional Development:</i> All-staff daylong session on inquiry and agency
October 17–19, 2017	<i>Classroom Observations:</i> U.S. History, English Language Arts, Ethics, Art, Geometry <i>Student Support Observations:</i> Peer Group Counselor session, advisories
November 29, 2017	<i>Classroom Observations:</i> Chemistry class
April 13, 2018	<i>Classroom Observations:</i> Social Studies, English Language Arts, Math, Science, Leadership class <i>Student Support Observations:</i> Freshmen advisories

Documents and Databases

The final data source for this study was organizational documents and databases. The research teams collected and reviewed documents, including:

- **Administrative documents:** school policy, mission, and vision statements, written and electronic communications sent to students and parents; documents and readings provided to teachers for professional development; schedules; and webpages
- **Curriculum and assessments:** professional development materials, curriculum overviews, classroom visuals, and rubrics for teacher feedback and performance assessment
- **District documents:** district data about school's performance; district data about school's demographics
- **Press:** news reporting about the school's history and performance; news about the district's discipline policies; news and documents about state education policies; and documents on neighborhood demographics.

Researchers reviewed these documents to understand the school's history, its mission and impact, contextual factors, and its programmatic approach for teacher and student learning. Curriculum and assessment materials also helped researchers triangulate data with regard to the continued implementation of the school's inquiry-based approach to learning, its integration of social and emotional learning into academic learning, its system of professional learning supports, and its efforts to be responsible to its mission to be a caring community committed to teaching the way its students learn best.

Analysis

To analyze the data, the researchers engaged in a multi-step process. First, they created a preliminary code list based on the ideas present in the semi-structured interview protocol. They then supplemented this code list with codes drawn from the emerging science of learning and development research.

Once the codes were refined, researchers applied them to interview transcripts, field notes, and documents. To increase inter-rater reliability, researchers met periodically to refine their analysis and their findings' consistency. Once coding was completed, researchers triangulated findings across multiple data sources, seeking confirmatory and disconfirmatory evidence, and collected additional data related to points that were emerging from the evidence but needed further clarification.

Appendix B: Bronxdale High School Practices Aligned With the Science of Learning and Development

I. Supportive Environment	
Structures for effective caring	<ul style="list-style-type: none"> • Small school of 445 students • Small class sizes average 22 students; pupil-teacher ratio 12:1 • Advisory class 2-3 times per week • Interdisciplinary grade-level teams • Distributed Counseling approach in which everyone in the school takes collective responsibility for students' academic, social, and emotional development and well-being, rather than compartmentalizing this responsibility to guidance departments • Institute for Student Achievement (ISA) provides coaching for inquiry instruction, counseling, and advisory
Classroom learning communities	<ul style="list-style-type: none"> • Intentional community building is central to the school's vision for creating a safe, caring, collaborative community and supported by Peer Group Connections (PGC)—staff are present throughout the building and go outside the building to see students off at the end of the day • Cultural competence through culturally responsive content • Identity safety through practices such as accountable talk that enable students to experience school as a “safe haven” • Consistent routines such as journaling, class meetings, regular one-on-one check-ins, and careful observation help teachers to know their students well
Connections among staff and families	<ul style="list-style-type: none"> • Relational trust is fostered through advisories and the Student Support Team which includes restorative deans • Staff collaboration • Authentic family engagement includes parent involvement, parent communication, meet-and-greet nights, and family dinners
II. Social and Emotional Development	
Integration of social-emotional skills	<ul style="list-style-type: none"> • Teaching of intra- and interpersonal skills, such as conflict resolution, collaboration, and responsibility • Integrate and practice skills throughout the day by integrating social-emotional learning with instruction and having social-emotional skills taught through their PGC program, in which a 12th-grade peer leader acts as a peer mentor and source of support for 9th-grade students
Development of habits and mindsets	<ul style="list-style-type: none"> • Academic structures such as revision that develop growth mindset and self-efficacy • Student community and leadership to support sense of belonging and encourage student voice
Educative and restorative behavioral supports	<ul style="list-style-type: none"> • Restorative justice program teaches students behavioral skills and responsibility • Cultivation of community contributions by students • Repair harm by making amends anchored in restorative practices such as peer mediation, circles, and youth court

III. Productive Instructional Strategies	
Student-centered instruction	<ul style="list-style-type: none"> • Efforts to draw on students' life experiences in multiple ways • Teaching to readiness • Collaborative learning • Cognitive supports include shared protocols for research, writing, evaluation of primary sources, etc., and posters with reminders about work processes, sentence starters, and strategies
Conceptual understanding and motivation	<ul style="list-style-type: none"> • Inquiry and explicit instruction through project-based learning • Motivating tasks with skillful scaffolding to engage student interest • Interest-driven learning, for example, through the capstone project, in which students select a question of interest or passion to research and to become an expert on
Learning how to learn	<ul style="list-style-type: none"> • Performance assessments, including a senior year capstone project; help students initiate, design, and conduct research • Rubrics help students understand what is being asked of them, guiding work and revisions • Regular opportunities for formative feedback, practice, and revision, including through student-peer review and self-advocacy in self-grading
IV. Systems of Support	
Multi-tiered systems of support (MTSS)	<ul style="list-style-type: none"> • Student Support Team proactively identifies the resources and supports required for students and staff to be successful • Advisory committee that includes the social workers, counselor, and restorative deans supports and monitors the implementation of advisory curriculum and initiatives
Coordinated access to integrated services	<ul style="list-style-type: none"> • Wraparound health, mental health, and social services • Community partnerships (e.g., Global Kids, My Brother's Keeper, Lincoln Center) engage with the school variously, through curriculum development, teacher development opportunities, and after-school and student fieldwork activities, which can support students' capstone projects • Family and community engagement
Extended learning opportunities	<ul style="list-style-type: none"> • Extended school day and school year to provide enrichment, mentoring, and academic support • Summer learning opportunities • Tutoring

Endnotes

1. The “comparison group” consists of students from other schools across the city who were the most similar to Bronxdale students based on their incoming standardized test scores, disability status, economic need, and over-age status. The comparison group result is an estimate of how the students at this school would have performed if they had attended other schools throughout the city. See: New York City Department of Education. (n.d.). 2017–18 School Quality Snapshot: Bronxdale High School (11X508). <https://tools.nycenet.edu/snapshot/2018/11X508/HS/#SA>.
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5. New York City Department of Education. (n.d.). 2017–18 School Performance Dashboard: Bronxdale High School - [HS] 11X508. https://tools.nycenet.edu/dashboard/#dbn=11X508&report_type=HS&view=City.
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9. New York City Department of Education. (n.d.). 2017–18 School Quality Snapshot: Bronxdale High School (11X508). <https://tools.nycenet.edu/snapshot/2018/11X508/HS/#SA>.
10. New York City Department of Education. (n.d.). 2017–18 School Performance Dashboard: Bronxdale High School - [HS] 11X508. https://tools.nycenet.edu/dashboard/#dbn=11X508&report_type=HS&view=City. In response to the data on student college enrollment, Bronxdale has recently reorganized the college office by developing a partnership with an external organization that specializes in students’ college-going by sending specialists into the school to work with students on college applications.
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