

# WHAT DRIVES LEARNING:

Young People's Perspectives on  
the Importance of Relationships,  
Belonging, and Agency

RESULTS FROM A 2020 SURVEY  
OF HIGH SCHOOL YOUTH

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HOW  
LEARNING  
HAPPENS

# OVERVIEW

Relationships are the keystone of youth development.<sup>1</sup> They act as enzymes between a young person and their range of developmental experiences, helping them make sense of the world and their particular place in it. Relationships with adults, peers, and out-of-school (OST) staff have the potential to affirm and support a young person's sense of their own identity;<sup>2</sup> increase a sense of belonging and of being valued;<sup>3</sup> and provide a context for young people to express agency, power, and voice.<sup>4</sup> When young people feel known, safe, and supported by members of their learning communities, they are also more likely to be engaged in their learning, and see that learning as meaningful to them and to their lives.<sup>5</sup>

*What Drives Learning* is the third publication in the How Learning Happens research series conducted by the Center for Promise, the research division of America's Promise Alliance. Together with *All of Who I Am*<sup>6</sup> and *The State of Young People During COVID-19*,<sup>7</sup> *What Drives Learning* places adolescents' experiences and perspectives at the center of an urgent national conversation about prioritizing young people's social, emotional, and cognitive development. Collectively, the series explores what young people themselves say about what matters most for their learning.

*What Drives Learning* describes selected findings from a nationally representative survey<sup>A</sup> of high school-age youth.<sup>8</sup> The survey investigated four themes—**relationships, belonging, agency, and meaningful learning**—that emerged from the *All of Who I Am* qualitative study. Young people expressed, and research supports, these themes as supportive conditions for learning.<sup>9</sup> Of particular interest, given the findings in *All of Who I Am* and *The State of Young People During COVID-19*, was the question: **Do young people's relationships, together with experiences of belonging and agency, support their engagement and meaningful learning in school?**

In short, *What Drives Learning* suggests that they do. **Supportive relationships, higher levels of belonging, and greater experiences of agency have large, statistically significant, positive effects on engagement and meaningful learning, particularly when they are combined.** This is true whether the source of support is adults or peers, and whether the relationship is linked to experiences during school or in an OST environment. Other studies have demonstrated a positive association between relationships, belonging, and agency, independently, with engagement and learning outcomes. This study builds on those to first explore the effects on *multiple sources of relationships*, both in and out of school, on engagement and meaningful learning; and second, investigates differences in engagement and meaningful learning when relationships are *combined* with experiences of belonging and agency. As a result, this study's findings affirm, amplify, and extend previous research about the importance of relationships for youth development and the powerful ways that those relationships affect academic engagement.

## FINDINGS

- 1 Most high school age youth do not report experiencing many of the conditions that support their social, emotional, and cognitive learning.
- 2 There are notable disparities in high school youth who report experiencing supportive conditions for learning by gender, first language, parent education, race, and urbanicity.
- 3 Supportive relationships from multiple sources have independent and additive large positive effects on young people's reported engagement and meaningful learning.
- 4 Supportive relationships combined with either belonging or agency amplify the positive association between relationships and reported engagement and meaningful learning.

A Sampling parameters were used to ensure that our sample matched the population of high school students in the United States with respect to grade in school, race/ethnicity, gender, and region. Representative sampling is a strategy used to enhance external validity and improve confidence in the ability to generalize findings and estimates from the sample to the broader population of youth across the United States. See Laursen, B., Little, T. D. & Card, N. A. (Eds.) (2011). *Handbook of developmental research methods*. Guilford Press.

As school districts and youth-supporting programs grapple with myriad questions about how to safely structure learning this year, one urgent consideration is how to attend to all young people’s social, emotional, and cognitive learning needs. The disparities that this survey finds are doubly urgent, given that they echo some of the profound inequities that COVID-19 has highlighted in systems that serve young people and their families.<sup>10</sup> Regardless of the format that formal education takes in the coming months, the findings and the recommendations in this brief point educators, school leaders, and decision makers at all levels toward specific actions that can improve adolescents’ learning experiences.

Six themes emerged from the qualitative *All of Who I Am* study. *What Drives Learning* investigates four of these: relationships, belonging, agency, and meaningful learning. (The other two—intentionality and identity development—were not concepts that could easily be explored in an online survey). This publication refers to the concepts as “supportive conditions” for social, emotional, and cognitive learning.

**Supportive Relationships** refers to the perceived levels of support a young person experiences from the people in their learning settings. This includes adults in school, including but not limited to teachers; adults in OST programs; and peers.<sup>B</sup>

**Belonging** refers to a sense that a person has a rightful place within a community, that their identity and life experiences are included and valued within that community, and that who they are in a particular setting, e.g. school, is a true expression of who they are.<sup>C</sup>

**Agency** refers to a young person’s sense and expression of power over their environments and within their own lives. The ability to express agency within educational contexts can be understood as the level of voice or power that students have in being able to inform and participate in decision making, direct and organize their own learning, and influence their learning experiences.<sup>D</sup>

**Meaningful Learning** occurs when a young person’s educational activities and learning experiences are relevant to them, align with their life experiences and interests, and/or have value to them by connecting with their future orientations or life goals.<sup>E</sup>

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B Search Institute, 2019

C Goodenow, 1993

D Geldhof & Little, 2011; Mitra & Gross, 2009

E Barron & Darling-Hammond, 2008

# APPLYING THE SCIENCE OF HOW LEARNING HAPPENS

Across the fields of educational research and practice, there is an increasing consensus about how learning happens. This consensus—rooted in relational developmental systems theory, and informed by advances in neuroscience, psychology, and education<sup>11</sup>—asserts that young people’s learning is best realized when “all aspects of the educational environment support all of the dimensions of children’s development.”<sup>12</sup> Learning, from this perspective, is not the exclusive province of core academic content classes, a particular pedagogy, or the acquisition of discrete literacy and numeracy skills. Rather, learning is an active process that occurs through interdependent social, emotional, cognitive, and relational developmental processes;<sup>13</sup> within and outside of school;<sup>14</sup> and when learning is aligned with young people’s full lived experience.<sup>15</sup>

## Relationships, Belonging, and Agency for Adolescents

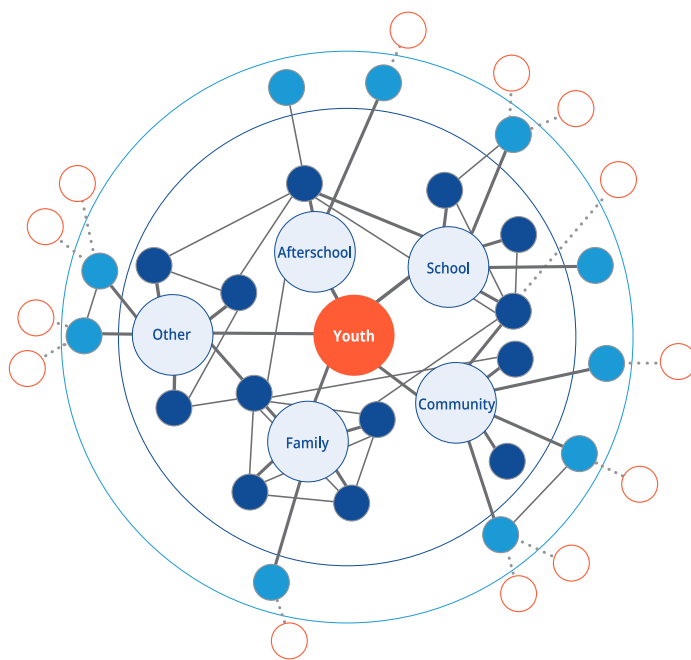
Young people grow up at the center of complex and dynamic systems of the environments that make up their lives—including family, schools, and community. A Webs of Support framework<sup>16</sup> asserts that young people have the greatest opportunity for healthy and positive development when their lives are saturated with a diverse range of relationships that provide an array of support across multiple environments. These relationships allow for young people to be known well, provided with needed resources, and given appropriate and challenging opportunities to learn and grow within a context of safety and nurturance.

Despite the documented importance of relationships, belonging, and agency for creating supportive and empowering learning environments, those experiences are often the exception rather than the norm. High schools, particularly those in underfunded districts that have high student-teacher ratios, historically provide little opportunity for students to form close relationships with adults or collaborate with peers.<sup>17</sup> As a result, students paradoxically report lower levels of relatedness as they progress through school,<sup>18</sup> even though high levels of social support during adolescence are associated with a range of positive educational outcomes.<sup>19</sup> In most high school classrooms across the country, teacher talk dominates, students are not involved in school-level decision making, and there are limited opportunities for student-driven inquiry, creating barriers to students’ experiences of agency.<sup>20</sup>

Additionally, a long history of discriminatory and exclusionary disciplinary systems and practices,<sup>21</sup> English-only instructional policies,<sup>22</sup> disproportionate gender representation in STEM fields,<sup>23</sup> and a curriculum centered on a white and Western experience<sup>24</sup> has created significant barriers to a sense of belonging across student populations.<sup>25</sup>

As schools increasingly shift towards student-centered educational paradigms, there is a need for increased knowledge about the ways that higher levels of relationships, belonging, and agency contribute to more positive educational experiences for all young people.<sup>26</sup> To that end, this study uses as outcome measures two components of academic engagement (emotional and behavioral) as well as whether students see their learning as meaningful to their lives and futures. Both constructs are related to higher levels of academic investment and motivation, in addition to key academic outcomes such as improved grades, educational persistence, and graduation rates.<sup>27</sup>

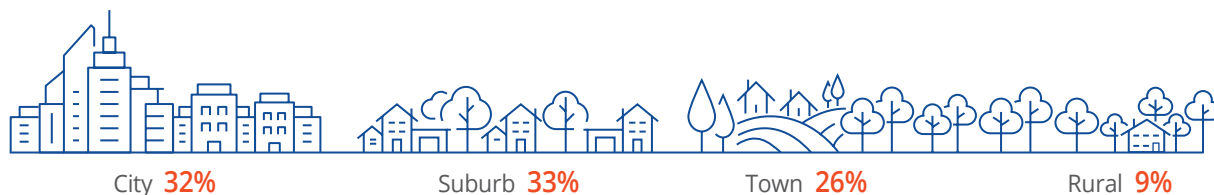
WEBS OF SUPPORT FRAMEWORK



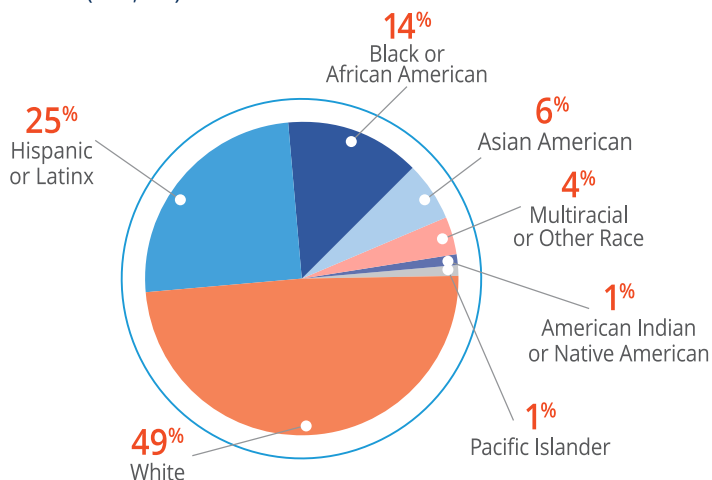
# ABOUT THIS STUDY

This brief presents findings from a nationally representative survey of 3,300 high school students, aged 13-19, administered over a two-week period from April to May 2020. Respondents were evenly split across grades 9-12 and were 49% female, 50% male, and 1% non-binary. At the time of survey dissemination, most students were not physically attending school due to the pandemic caused by COVID-19. While the survey asked students to respond based on their experiences attending school prior to the pandemic, the timing of the survey and the retrospective nature of the questioning may have biased the answers. The questions and the analysis presented in this brief explore the extent to which young people's experiences across the country reflect four of the themes (relationships, belonging, agency, and meaningful learning) identified in *All of Who I Am*; examines relationships among those themes; and investigates how those relationships might influence young people's learning.

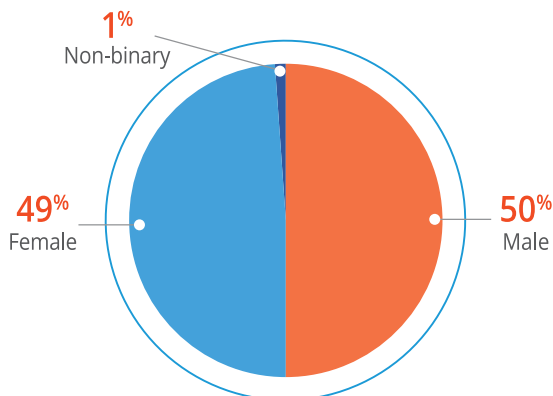
## DEMOGRAPHIC BREAKDOWN BY URBANICITY (N=3,300)



## DEMOGRAPHIC BREAKDOWN BY RACE (N=3,300)



## DEMOGRAPHIC BREAKDOWN BY GENDER (N=3,300)



## The Survey Process

In order to understand young people's experiences with the selected themes, the 3,300 survey participants were presented with a series of statements and asked to indicate their level of agreement on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree." Table 1 lists the theme of interest, the source of the scale used to measure it, and several sample items to illustrate the types of questions representing each area of interest.

The following questions guided the survey research and analysis:

1. To what extent do young people across the country:
  - a. experience supportive adult and peer relationships both in and out of school;
  - b. feel a sense of belonging in their schools;
  - c. feel empowered within those school environments; and
  - d. experience their learning in school as meaningful to them and to their lives?
2. Are there differences in these experiences across subgroups: race, ethnicity, gender, language spoken at home, parent education level, and the type of community where they live (i.e. urban, suburban, town, rural)?
3. Are young people's relationships with adults and peers, both in schools and OST settings, connected to their engagement in school and meaningful learning?
  - a. Are those associations shaped by the sense of belonging and agency that young people feel in those environments?

For the first two research questions, responses were dichotomized, with every negative or neutral response understood as "no, I do not experience that," and affirmative responses understood as "yes, I do experience that." Each "no" was counted as zero and each "yes" was counted as one. Each scale was split at the median (50th percentile) and participants were given a score of "1" if they scored at least a quarter of a standard deviation above the median and a score of "0" if they scored at least a quarter of a standard deviation below the median. Neutral responses (those within a quarter of a standard deviation above or below the median), were not included in the dichotomization.

Collapsing scales into dichotomous "yes" and "no" categories loses some of the nuance and complexity of responses; however, it is helpful for interpretation. For research question one, the dichotomous variables allow for an easily interpretable general overview of the overall proportion of young people who report experiencing each of these themes without losing much of the additional information that would be provided in the Likert scale responses. For research question two, the dichotomous outcomes allow for conducting easily understood comparisons between groups—e.g., comparing relative likelihoods of two or more groups experiencing that condition for learning—which helps to better understand the disaggregated differences across subgroups.

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F For a complete methodology, survey measures, and demographic breakdown of survey respondents, please see the accompanying [Appendix](#).

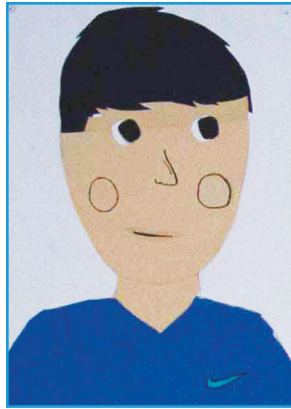
For research question three, analysis was conducted using the full range of responses for each scale in order to maintain the full nuance and variation within each measure. The third research question was focused on understanding the relationships **among** subjective experiences (i.e., relationships, belonging, agency, engagement, and meaningful learning), so it was important to use the entire range of the scales to allow the research team to fully observe the relationships of interest.<sup>28</sup> See the [Appendix](#) for a more in depth discussion of methodology.

TABLE 1: CONDITIONS, MEASURES, AND SAMPLE ITEMS ASSESSED IN THE SURVEY

THEME/SUPPORTIVE CONDITION	MEASURED BY	SAMPLE ITEMS
<b>Supportive relationships with school adults</b>	10 items from the Child and Adolescent Social Support Scale <sup>29</sup>	<ul style="list-style-type: none"> <li>• Adults at my school spend time with me when I need help.</li> <li>• Adults at my school care about me.</li> </ul>
<b>Supportive relationships with out-of-school time adults</b>	5 items adapted from the Child and Adolescent Social Support Scale <sup>30</sup>	<ul style="list-style-type: none"> <li>• Staff in this program care about me as a person.</li> <li>• Staff in this program notice if I am struggling.</li> </ul>
<b>Supportive relationships with school peers</b>	10 items from the Child and Adolescent Social Support Scale <sup>31</sup>	<ul style="list-style-type: none"> <li>• My classmates understand my feelings.</li> <li>• My classmates treat me with respect.</li> </ul>
<b>Agency</b>	12 items adapted from the Student Leadership Capacity Scale <sup>32</sup>	<ul style="list-style-type: none"> <li>• At my school, I am able to work with adults to accomplish common goals.</li> <li>• At my school we respect the voices of all members of the community.</li> </ul>
<b>Belonging</b>	10 items from the Simple School Belonging Scale <sup>33</sup>	<ul style="list-style-type: none"> <li>• Other students here like me the way I am.</li> <li>• I feel like I matter to people at my school.</li> </ul>
<b>Behavioral Engagement</b>	5 items adapted from Seattle School Development Project <sup>34</sup>	<ul style="list-style-type: none"> <li>• I work hard at school.</li> <li>• I complete my schoolwork regularly.</li> </ul>
<b>Emotional Engagement</b>	6 items adapted from Seattle School Development Project <sup>35</sup>	<ul style="list-style-type: none"> <li>• The work I do in school is interesting.</li> <li>• Most mornings, I look forward to going to school.</li> </ul>
<b>Meaningful Learning</b>	10 items adapted from the Five Essentials Survey <sup>36</sup>	<ul style="list-style-type: none"> <li>• My experiences in school help me become a better person.</li> <li>• What I learn in school is connected to my life outside of school.</li> </ul>

Given the documented importance of relationships and relationship-rich learning settings, supportive relationships were hypothesized as a primary predictor of the two key outcomes related to academic learning—school engagement and meaningful learning.

School engagement has both emotional and behavioral components. **Emotional** components of engagement refer to a young person’s feelings about school, whether they value doing well, and the trust they feel towards their school communities. **Behavioral** components of school engagement refer to a young person’s level of participation—e.g., whether they complete their work, attend school, and participate in school and OST activities. School engagement broadly relates to a range of important academic outcomes such as improved attendance, grades, and graduation rates.<sup>37</sup> **Meaningful learning** refers to a young person’s sense that what they are doing and learning in school is relevant to their lives outside of school, relates to their lives and future goals, and instills a purpose for learning that extends beyond the self. For a full list of survey items measuring each outcome, see the [Appendix](#).<sup>38</sup>

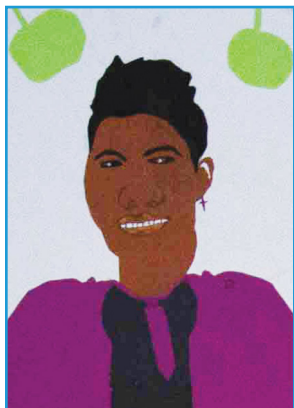


## FINDINGS

As noted in the Overview, analysis of the survey responses in the context of the research questions yielded four key findings:

- 1 Most high school age youth do not report experiencing many of the conditions that support their social, emotional, and cognitive learning.
- 2 There are notable disparities in high school youth who report experiencing supportive conditions for learning by gender, first language, parent education, race, and urbanicity.
- 3 Supportive relationships from multiple sources have independent and additive large positive effects on young people's reported engagement and meaningful learning.
- 4 Supportive relationships combined with either belonging or agency amplify the positive association between relationships and reported engagement and meaningful learning.

The following sections present survey results for each area of inquiry. Described first are overall percentages of how many young people reported affirmatively to the specific theme and then differences in those responses across demographic subgroups.



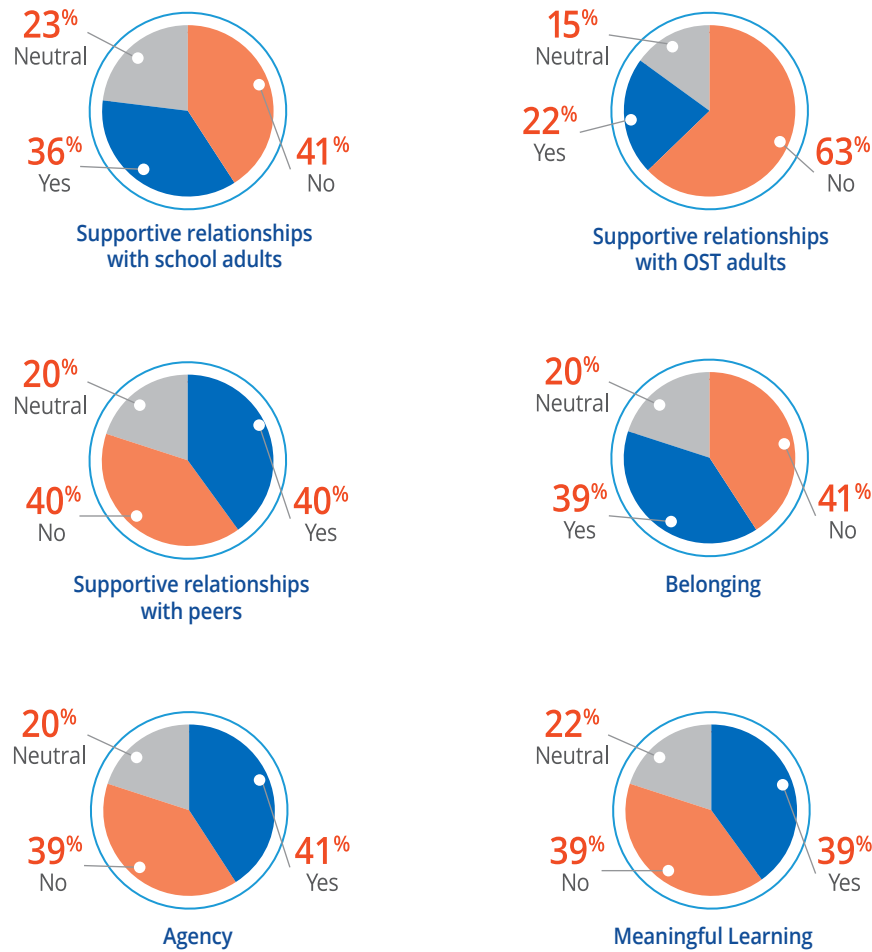


# 1

## Too Few Young People Report Experiencing Supportive Conditions

For each of the themes the survey explores, more than half of young people say “no” when asked whether they are experiencing that type of support. **While at least one-third of young people report experiencing each condition individually, the majority of young people report that they are not experiencing the conditions that support their learning and development.**

FIGURE 1: OVERALL PROPORTIONS OF RESPONDENTS THAT REPORT EXPERIENCING EACH CONDITION



These responses represent more positive responses than some previous research, and are cautionary compared to others.<sup>39</sup> One 2018 study, for instance, found that a little more than one-third (38%) of high school students surveyed reported that their teachers expressed care for them; and fewer than half (about 45%) reported a sense of belonging.<sup>40</sup> However, in contrast to the 2009 High School Survey of Student Engagement which found that 88% of students felt that there was at least one adult in their school who cares about them, less than half of respondents in this survey reported having supportive relationships with school adults.<sup>41</sup> These discrepancies may be due to differences in measurement items, as well as samples, and call for ongoing learning and measurement clarity about the presence of these supportive conditions in the young people’s educational environments.

## 2 Disparities Exist in Who Experiences Supportive Conditions

Some groups of young people reported higher levels of supportive conditions than others. The following disaggregated results represent comparisons after controlling for every other disaggregating variable. Young people who had a parent graduate from college (an indicator reflecting both socioeconomic status (SES) and social capital)<sup>42</sup> and those who speak English at home, for example, were more likely to experience supportive conditions for learning compared to those who had no parent graduate from college or reported not speaking English at home. Young people with a parent who had completed college were 51% more likely to experience supportive adult relationships, 62% more likely to experience supportive peer relationships, 96% more likely to have meaningful learning experiences within school, and 126% more likely to experience a sense of belonging in school. While there were few differences by race after controlling for other variables, Latinx students reported lower levels of belonging and meaningful learning than white students. There were also differences by urbanicity: young people in cities were more likely to report experiencing many of the conditions of interest.

A recent survey of teachers found that 97% believe that a sense of belonging was important for students to feel able to succeed in school, but many also expressed a perception that students in their classroom may be worried about being judged for various parts of their identity, and 80% expressed wanting more support to help foster a sense of belonging for students in their classrooms.<sup>43</sup>

Teacher perceptions that some student groups have a lower sense of belonging was corroborated in the current study: female students, young people who did not have a parent who graduated from college, or who did not speak English at home, reported lower levels of belonging. Young people who identified as Latinx also reported lower levels of belonging than white students.

The large disparities based on parent education level are also noteworthy in light of school building closures due to COVID-19. Recent analyses have shown that students who do not have a parent who graduated from college have also had less interaction with teachers and less access to home instruction while participating in remote learning.<sup>44</sup> Those findings combined with the present analysis suggest that these young people were less likely to be experiencing supportive conditions prior to the pandemic, and that these gaps may be compounded by not attending school in person.

**Young people's relational supports, sense of being valued, and their ability to express power and have voice over their learning experiences are critical avenues for supporting their learning and development.**

TABLE 2: LIKELIHOOD OF EXPERIENCING EACH CONDITION DISAGGREGATED ACROSS SUBGROUPS

GENDER	AT LEAST ONE PARENT COMPLETED COLLEGE (PROXY FOR SES)	SPEAK ENGLISH AT HOME	URBANICITY (URBAN, SUBURBAN, TOWN, RURAL)	RACE (BLACK, WHITE, LATINX, ASIAN)
<b>Supportive relationships with school adults</b>				
Female students <b>18% less likely</b> than male students	Youth with a parent who completed college are <b>51% more likely</b> than youth whose parent(s) did not	Youth who report English as their first language are <b>49% more likely</b> than youth with a first language other than English	Youth in towns ( <b>33%</b> ) and rural communities ( <b>41%</b> ) <b>less likely</b> than youth in cities	—
<b>Supportive relationships with OST adults</b>				
Female students <b>18% less likely</b> than male students	Youth with a parent who completed college are <b>52% more likely</b> than youth whose parent(s) did not	Youth who report English as their first language are <b>50% more likely</b> than youth with a first language other than English	Youth in towns ( <b>19%</b> ) <b>less likely</b> than youth in cities	—
<b>Supportive relationships with school peers</b>				
Female students <b>30% less likely</b> than male students	Youth with a parent who completed college are <b>62% more likely</b> than youth whose parent(s) did not	Youth who report English as their first language are <b>93% more likely</b> than youth with a first language other than English	Youth in towns ( <b>32%</b> ) and rural communities ( <b>33%</b> ) <b>less likely</b> than youth in cities	—
<b>Belonging</b>				
Female students <b>38% less likely</b> than male students	Youth with a parent who completed college are <b>126% more likely</b> than youth whose parent(s) did not	Youth who report English as their first language are <b>54% more likely</b> than youth with a first language other than English	Youth in towns ( <b>27%</b> ) and rural communities ( <b>31%</b> ) <b>less likely</b> than youth in cities	Latinx students ( <b>25%</b> ) <b>less likely</b> than white students
<b>Agency</b>				
Female students <b>29% less likely</b> than male students	Youth with a parent who completed college are <b>81% more likely</b> than youth whose parent(s) did not	Youth who report English as their first language are <b>39% more likely</b> than youth with a first language other than English	Youth in towns ( <b>31%</b> ) and rural communities ( <b>31%</b> ) <b>less likely</b> than youth in cities	—
<b>Meaningful Learning</b>				
Female students are <b>22% more likely</b> than male students	Youth with a parent who completed college are <b>96% more likely</b> than youth whose parent(s) did not	Youth who report English as their first language are <b>42% more likely</b> than youth with a first language other than English	Youth in suburbs ( <b>25%</b> ) towns ( <b>40%</b> ) and rural communities ( <b>32%</b> ) <b>less likely</b> than youth in cities	Latinx students ( <b>28%</b> ) <b>less likely</b> than white students

Each finding significant at  $p < 0.05$ ; — indicates no significant findings across subgroups.

### 3 Supportive Relationships From Multiple Sources Predict Engagement and Meaningful Learning

Multiple studies have shown positive and meaningful associations among relationships, belonging, agency, and engagement and learning outcomes.<sup>45</sup> While distinct, these experiences are related to one another. In one review of factors that promote school belonging, for instance, caring relationships with teachers was the greatest predictor of school belonging.<sup>46</sup> Other studies have found that positive relational environments can promote expressions of agency and voice, which in turn promote higher levels of interpersonal trust, lower levels of defiance, and increased engagement.<sup>47</sup>

No studies to date, however, have investigated the compounding effect of relationships from multiple sources (i.e. school adults, peers, OST adults), plus belonging or agency, on learning outcomes, using a nationally representative sample of high school students.<sup>48</sup> *What Drives Learning* therefore makes a unique contribution to how the youth-supporting field understands the powerful effect of relationships for adolescents. Below we discuss the ways relationships predict learning outcomes, the additive nature of these relationships on those outcomes, and the ways that belonging and agency amplify those effects.

The research team set out to explore how much of the differences (i.e., variation) in young people's reported engagement and meaningful learning could be attributed to their relationships with school adults, peers, and OST adults. The initial analysis considered how much of the differences in those ratings was accounted for by demographic factors. Analysis revealed that demographic covariates like gender, parental education, English as primary home language, race/ethnicity, and urbanicity together account for less than 10% of the differences in young people's reported engagement or meaningful learning. That is, youth's engagement with learning and how meaningful those learning experiences are for them, is only slightly based on their demographic characteristics. The next level of analysis kept all of those covariates, but also included an average score of young people's reported relationships and looked at the change in reported engagement and meaningful learning.

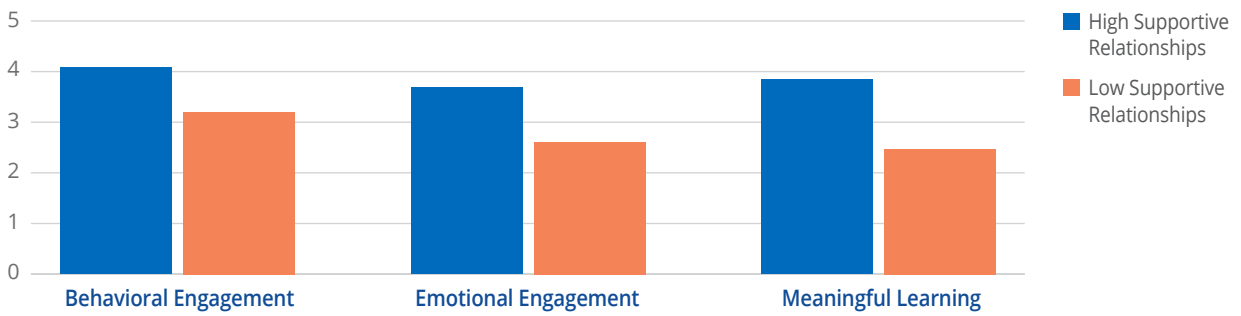
Supportive relationships accounted for a moderate amount of the variance in reported behavioral engagement (23%) and large amounts of the variance<sup>G</sup> in emotional engagement (40%) and meaningful learning (47%).<sup>H</sup> Critically, regardless of which relationship source was examined, the changes in reported engagement and meaningful learning remained roughly the same, suggesting that supportive relationships, regardless of their source, are highly related to behavioral and emotional engagement and meaningful learning (see Figure 2).

**Supportive relationships, regardless of their source, are highly related to behavioral and emotional engagement and meaningful learning.**

G Variance refers to how much (on average) individual scores differ from the average score. Statistical models attempt to explain variance. That is, why people score differently on a measure. For instance, the finding that covariates account for 7% of the variance in behavioral engagement means that the covariates account for 7% of why people score differently on behavioral engagement. In other words, even after accounting for all covariates (gender, age, parent education, etc.), those variables are still only accounting for only 7% of why people score the way they do on behavioral engagement.

H %s refer to  $\Delta R^2$ . For additional methodological description, please see the Appendix.

**FIGURE 2: ESTIMATED ENGAGEMENT AND MEANINGFUL LEARNING SCORES BY HIGH AND LOW SUPPORTIVE RELATIONSHIPS**



-Y axis refers to the Likert scale scoring for the particular measure.

-Relationship scores across all sources were averaged to create an overall relationship score. Averages of 4 or greater were considered "High Supportive Relationships" and those of 2 or lower were considered "Low Supportive Relationships."

-The bar magnitudes refer to the predicted behavioral engagement, emotional engagement, and meaningful learning scores for youth with High and Low Supportive Relationships, respectively.

Next, the research team wanted to understand whether the number of sources of supportive relationships led to even higher levels of reported engagement and meaningful learning. Thus, we added a variable representing the cumulative number of supportive relationship sources reported by a given young person. For example, if a young person reported supportive adult relationships at school but no supportive peer or OST adult relationships, their score would be "1." Alternately, if a young person reported having all three sources of supportive relationships, their score would be "3."

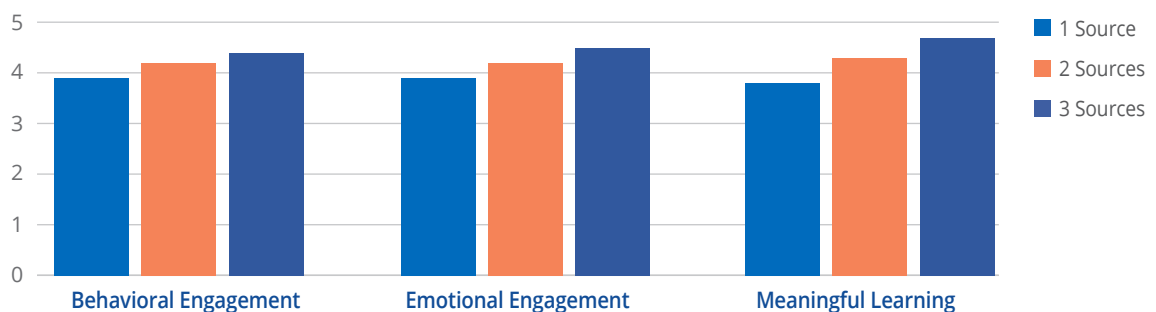
**Percentages of young people who reported 0, 1, 2, or 3 sources of supportive relationships**

- 0 - 43.6%
- 1 - 13.9%
- 2 - 21.8%
- 3 - 20.5%

We found that relationships had an additive effect. The number of sources of support a young person reported predicted increases in behavioral and emotional engagement and in meaningful learning. After accounting for covariates, for each additional source of supportive relationship that a youth reports, behavioral engagement scores increase by approximately 10%, emotional engagement scores increase by approximately 10% and meaningful learning scores increase by approximately 12%.

Importantly, all sources of support meaningfully predict all three outcomes. While this analysis does not provide insight into direction or causality, this finding reinforces the notion that academic engagement, experiencing one's learning as meaningful, and having multiple sources of support both in school and OST settings are interrelated.

**FIGURE 3: ESTIMATED ENGAGEMENT AND MEANINGFUL LEARNING SCORES BY NUMBER OF REPORTED SOURCES OF SUPPORTIVE RELATIONSHIPS**



## 4 Relationships Plus Belonging or Agency Amplify Engagement and Learning

Finally, the research team wanted to know whether relationships combined with a sense of belonging or a sense of agency had an additional effect on reported levels of engagement and meaningful learning. In short, when young people had high levels of support from multiple sources and experienced a strong sense of belonging or agency, they were more likely to report higher levels of engagement and meaningful learning.

In order to explore this question, the research team created a latent variable representing each young person's reported levels of supportive relationships across all sources to create an overall measure of support. That overall measure of support was used to compare predicted engagement and meaningful learning scores among youth with *high* supportive relationships (an average score of 4 or greater) to youth with *low* supportive relationships (an average score of 2 or lower). Young people's sense of belonging and agency was similarly split. Youth with *high* belonging (or agency) were those with an average score of 4 or greater, and those with *low* belonging or agency were those with an average score of 2 or lower. The team then explored predicted engagement and meaningful learning outcomes when young people have multiple sources of supportive relationships *and* high levels of belonging or agency, respectively.

Young people with high levels of supportive relationships who **also** have high levels of belonging demonstrate, by far, the highest engagement and meaningful learning scores. These students report 16% higher levels of behavioral engagement, 27% higher levels of emotional engagement, and 32% higher levels of meaningful learning than students who have a strong sense of belonging but have low levels of supportive relationships (see Figures 4-6).

FIGURE 4: EFFECT OF SUPPORTIVE RELATIONSHIPS PLUS BELONGING ON BEHAVIORAL ENGAGEMENT

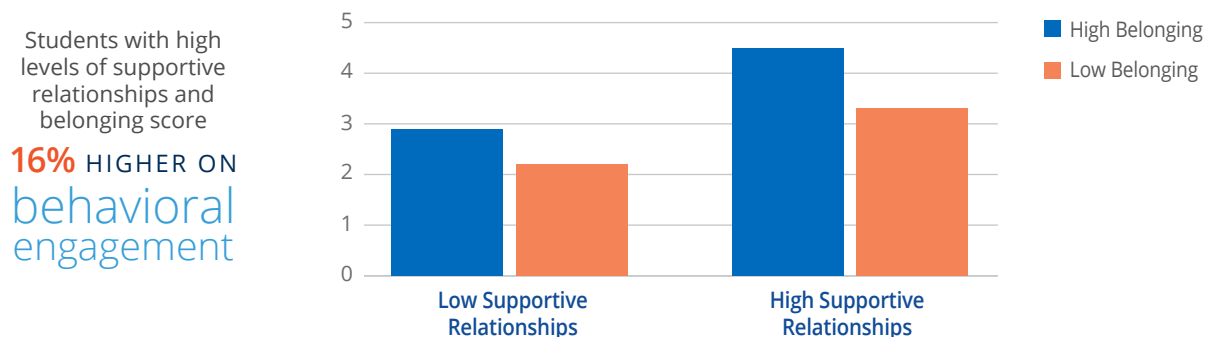


FIGURE 5: EFFECT OF SUPPORTIVE RELATIONSHIPS PLUS BELONGING ON EMOTIONAL ENGAGEMENT

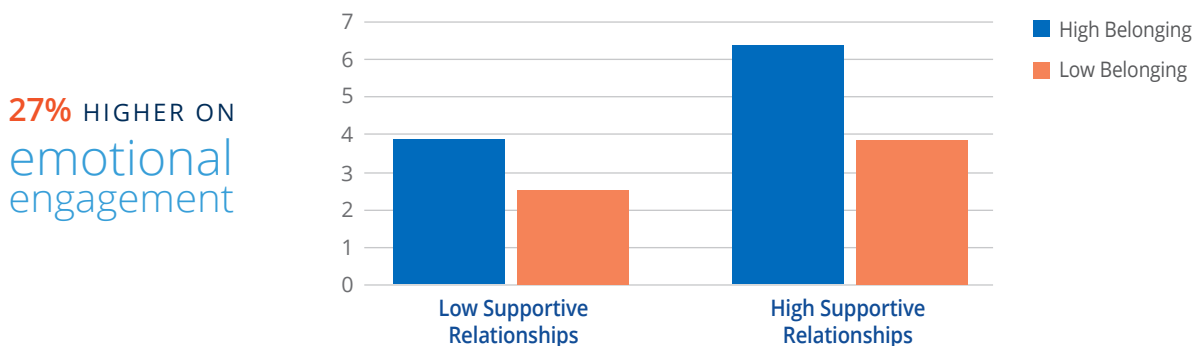
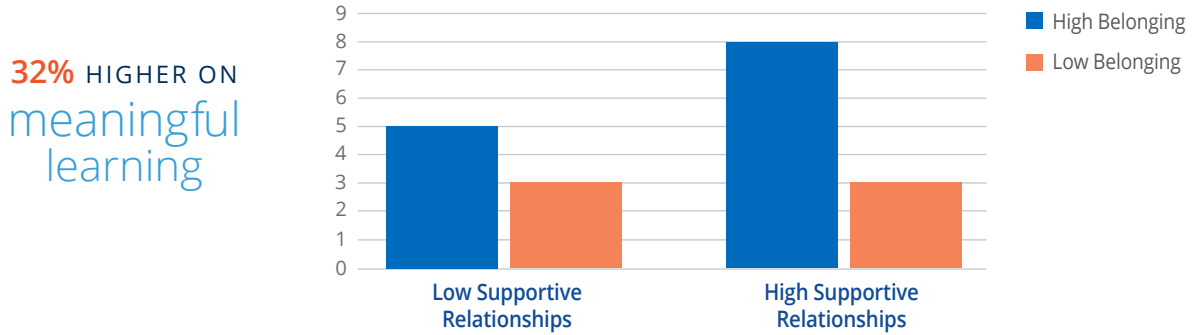


FIGURE 6: EFFECT OF SUPPORTIVE RELATIONSHIPS PLUS BELONGING ON MEANINGFUL LEARNING



Previous research has stressed how important a sense of belonging is for young people’s success in school. This study adds to that body of work by demonstrating the multiplicative effect of having high levels of perceived support from multiple sources, as well as a high sense of belonging, on young people’s engagement and learning experiences. While having multiple sources of support matters, and having a sense of belonging matters, young people report the greatest benefits to their learning when they have both.

That same finding remains when high levels of support are combined with high levels of agency (see Figures 7-9). Results suggest that supportive relationships and agency have a similar additive effect on engagement and meaningful learning. That is, while supportive relationships and agency alone each predict increases in behavioral and emotional engagement and meaningful learning, students who have both supportive relationships and agency demonstrate far higher levels of reported engagement and meaningful learning than those who have supportive relationships alone.

FIGURE 7: EFFECT OF SUPPORTIVE RELATIONSHIPS PLUS AGENCY ON BEHAVIORAL ENGAGEMENT

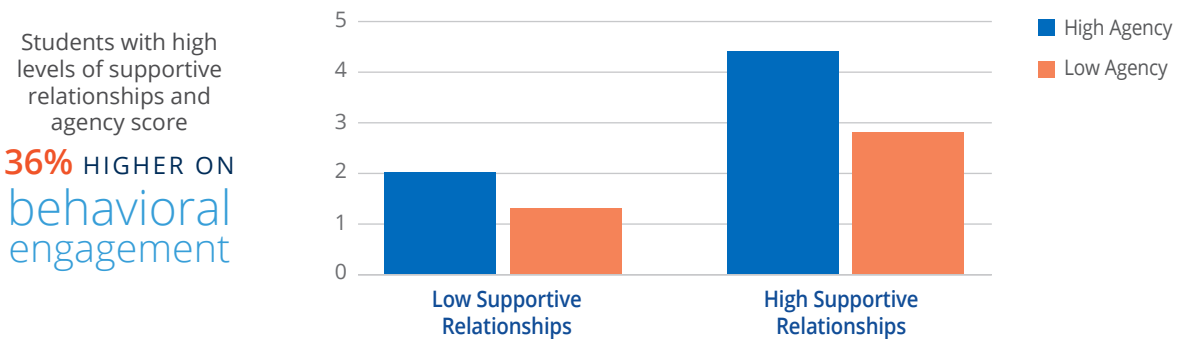


FIGURE 8: EFFECT OF SUPPORTIVE RELATIONSHIPS PLUS AGENCY ON EMOTIONAL ENGAGEMENT

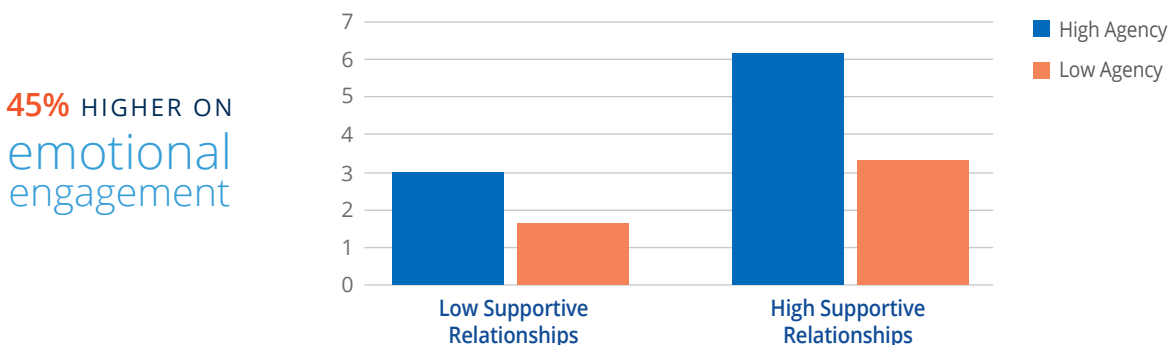
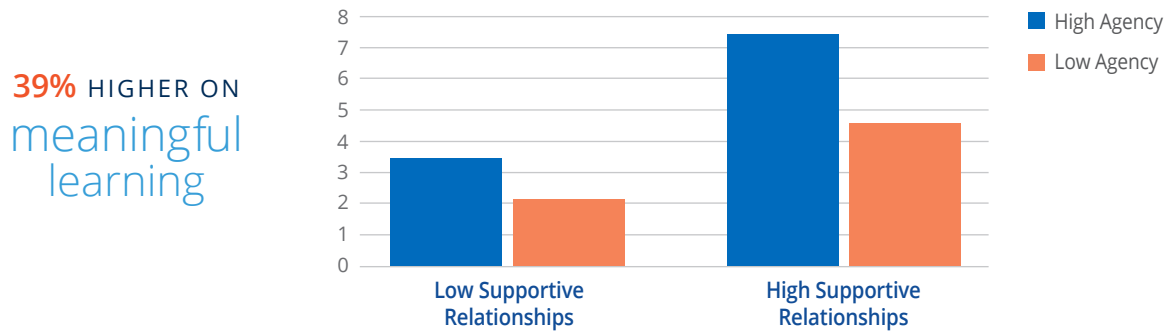


FIGURE 9: EFFECT OF SUPPORTIVE RELATIONSHIPS PLUS AGENCY ON MEANINGFUL LEARNING



Students who have a strong sense of agency and supportive relationships score 36% higher on behavioral engagement, 45% higher on emotional engagement, and 39% higher on meaningful learning than students who have a strong sense of agency but do not have supportive relationships.



# IMPLICATIONS AND RECOMMENDATIONS

The findings from this nationally representative survey offer convincing evidence that relationships with supportive adults and peers have a positive effect on high schoolers' social, emotional, and cognitive learning. Further, more sources of supportive relationships, both in and out of school, have an additive effect on improving young people's engagement and sense of meaningful learning. That's enormously hopeful news.

Fostering positive, caring relationships; creating environments where young people are seen and valued for their full selves; and supporting greater youth agency are at the heart of creating equitable and developmentally responsive learning environments.<sup>49</sup> Historic inequities, rooted in systemic racism and other forms of oppression, mean that not all high school-age youth are experiencing these conditions now. While COVID-related school and program closures have understandably deepened parents' and educators' fears about inequitable learning losses, the findings in *What Drives Learning* suggest that focusing on building relationships and fostering young people's sense that they belong will accelerate rather than impede academic progress.

Here are four things that school and community leaders can do now, and can keep doing, regardless of the different forms that schools and programs may take. The recommendations are followed by selected resources to inspire action.

- **Boost opportunities for more young people to experience more supportive learning conditions.** During a time when many young people are reporting a lack of connection to others, frequent and authentic communication is essential for understanding their experiences, increasing their engagement with learning, and checking in on their health and safety. Many schools are identifying specific ways for ensuring that young people are connected to caring adults. Educators, school leaders, out-of-school time leaders, parents, and policymakers can prioritize working alongside one another in an effort to boost each young person's connections with peers and adults who can support their sense of relatedness and belonging. This can be done in person, when possible, or by utilizing a variety of remote practices.
- **Ground schools and OST settings in equity and care.** Numerous studies have now demonstrated the disparities in ongoing learning loss due to COVID-19 across populations of young people. Those gaps in learning opportunities, compounded with the collective and disparate traumas young people report experiencing, illustrate how urgent it is to pay attention to every young person's experiences and needs. While these inequities pre-date COVID-19, they are made more apparent by, and exacerbated by, our current historical moment. As school resumes, there is a pressing need to offer more support to young people disproportionately impacted by COVID-19 and systemic racism while creating youth-supporting communities grounded in equity, care, and belonging.
- **Engage young people as leaders and partners.** Belonging is more than having a seat in a class. It is a feeling of being welcomed, valued, and included in multiple ways throughout the community. Young people are invaluable partners for school and program leaders in creating student-centered and community-rooted values and systems. There are examples of approaches to teaching and learning across the country that are demonstrating how young people can and should be leaders in co-creating the content and direction of their learning. By inviting young people's experiences, interests, and ideas into decision making that affects them, schools and OST programs can work to disrupt racist and inequitable systems and practices, build trust between parents and teachers, and create contexts for students to be leaders in their communities.
- **Connect learning to students' lives in meaningful ways.** In a July 16, 2020 *How Learning Happens* [webinar](#), young people described the experience of being out of the school building during the spring, and how that experience led them to reflect on their own identity, the issues impacting them in their lives, and the importance of maintaining those interests, concerns, and goals when they return to school. Classroom learning should not be distinct from young people's lives outside of school. Learning is meaningful, young people are more invested, and schools are more deeply connected to their communities when the content, practices, and structures of young people's school and OST experiences are connected with their lives.

Now more than ever, it is clear that learning happens everywhere. The public health, racial justice, and economic crises converging in 2020 create extraordinary possibilities for youth-supporting adults and systems to reimagine and reorganize learning structures around what is important for young people and their learning. In doing so, it is critical to ask and listen to young people about their experiences and needs. This brief, alongside *All of Who I Am* and *The State of Young People During COVID-19*, places young people at the center of that conversation, and highlights what they see as important to their own learning and development.

## SUGGESTED RESOURCES

### For teachers, out-of-school time program leaders, and other adults in direct support roles

- This [Youth Engagement Guide](#) from America's Promise Alliance provides considerations and strategies for youth serving adults interested in listening to and engaging with young people in their own communities.
- [Tips for Mentors Shifting to Text-Based Communication](#) from MENTOR offers practical suggestions for using technology tools to connect with young people.
- Search Institute's downloadable tools include a checklist for [Building Developmental Relationships During the COVID-19 Crisis](#).
- Facing History and Ourselves has an extensive digital library of resources for educators, including strategies for [teaching about current events](#), exploring the [continuing legacy of race and racism](#), and applying equitable teaching practices.
- [Creating Cultures of Care](#), from America's Promise Alliance, draws from both existing literature and on-the-ground community expertise to share important insights about trauma-informed practice.

### For school leaders and program administrators

- CASEL's [SEL Roadmap for Reopening Schools](#) is "designed to support school leaders and leadership teams in planning for the transition back to schools, in whatever form that takes."
- See Learning Policy Institute's writing about "Learning in the Time of COVID-19," e.g. [Supporting a Restorative Opening of US Schools](#).
- Reimagine what learning could look like by engaging students in design thinking and liberatory design strategies, using principles from [Imagining September](#) and ideas from [What If School Looked Like This?](#)
- Consult the extensive [resource library](#) at EL Education about how "reopening" offers an opportunity for more equitable schools.
- Education Week has released many resources on young people's social and emotional well-being during COVID-19, e.g. [Why Students Need Social Emotional Learning Now](#).

### For policymakers and elected officials

- Education Trust has been doing extensive research and writing about equity-centered responses to the impact of COVID-19. See, for example, [COVID-19: Impact on Education Equity—Resources & Responding](#) and a proposed P-12 agenda: [A P-12 Education Agenda in Response to COVID-19](#).
- A May 2020 [report from Everyone Graduates Center](#) connects social-emotional development with academic achievement and on-track outcomes, in a study of students in grades 3 through 10 supported by City Year AmeriCorps members.

# ENDNOTES

1. Pianta, Hamre, & Stuhlman, 2003
2. Hammond, 2020
3. Noddings, 2003; Goodenow, 1992
4. Mitra, 2008; Toshalis & Nakkula, 2012
5. Jones, McGarrah, & Kahn, 2019; Wentzel, 2017; Faircloth & Hamm, 2005
6. Pufall Jones, E., Margolius, M., Skubel, A., Flanagan, S., & Hynes, M., 2020
7. Margolius, M., Doyle Lynch, A., Pufall Jones, E. & Hynes, M., 2020.
8. The survey was conducted between April and May, 2020, when most school buildings were closed and students were learning remotely. The questions in the survey asked students to respond based on their experiences learning in person. Likewise, the current analysis relates to in and out of school experiences before the COVID-19 pandemic.
9. Darling-Hammond, Flook, Cook-Harvey, Barron & Osher, 2020; Pufall Jones et al., 2020
10. See, for example, analysis on potential learning loss from McKinsey & Co.; testimony from former U.S. Secretary of Education John King before the U.S. House Committee on Education and Labor on racial inequities exacerbated by COVID-19; this survey of parents from Learning Heroes; coverage in Education Week about disparities in remote learning and the particular effect of the COVID-19 crisis on teens.
11. Osher, Cantor, Berg, Steyer & Rose 2020; Cantor, Osher, Berg, Steyer, & Rose, 2020
12. Darling-Hammond et al., 2020
13. Aspen Institute, 2018
14. McCombs, Whitaker, & Yoo, 2017
15. Cohn-Vargas, Kahn, & Epstein, 2020
16. For a review see Flanagan, Zaff, Varga, & Margolius, 2020, and Varga & Zaff, 2018
17. Darling-Hammond, Ross, & Miliken, 2006
18. Wang & Dishion, 2012
19. Wang & Eccles, 2012
20. Yazzie-Mintz, 2010; Toshalis & Nakkula, 2012
21. Rocque & Paternoster, 2011; Losen, Hodson, Keith, Morrison, & Belway, 2015
22. Gandara, 2012
23. Vincent-Ruz & Schunn, 2017
24. Ladson-Billings, 1985; Tyack & Tobin, 1994
25. Cook & Purdie-Vaughns, Garcia, & Cohen, 2012; Mello, Mallet, Andretta, & Worrell, 2012
26. Noguera, 2017
27. Fredricks, Blumenfeld, & Paris, 2004; Wigfield et al., 2015; Yeager et al., 2014; Vansteenkiste et al., 2004
28. There are potential complications with analyses relating subjective experiences or beliefs to one another. These include problems with overlapping measurement items (i.e. "People at my school care if I am absent"—belonging—vs. "adults in my school care about me"—*supportive relationships with school adults*) as well as conceptual overlap, where constructs referred to by different names are understood similarly (Libbey, 2004). These confounding problems are referred to as jingle-jangle fallacies (Marsh et al., 2019). In order to account for that, to the extent possible, measures were selected that had been previously validated, and scale validation as well as confirmatory factor analyses were conducted on each construct to ensure that each set of items loaded discretely onto the proposed factor. While these analyses provide new information on the relations among these constructs, correlations among the measures were medium to high ( $r$  range = .59-.75) suggesting that these experiences are related, yet distinct. Additional clarity on these constructs will be useful for future research.
29. Demaray & Malecki, 2002

30. Demaray & Malecki, 2002
31. Demaray & Malecki, 2002
32. Lyons, Brasof, & Baron, 2020
33. Whiting, Everson, & Feinauer, 2018
34. Hawkins, Guo, Hill, Batton-Pearson, & Abbott, 2007
35. Hawkins, Guo, Hill, Batton-Pearson, & Abbott, 2007
36. Sebring, Allensworth, Bryk, Easton, & Luppescu, 2006
37. For a review of school engagement literature, see Fredricks, Blumenfeld, & Paris, 2004; Christenson, Appleton, & Furlong, 2008; and Lawson & Lawson, 2013
38. Yeager et al, 2014; Wigfield et al., 2015
39. Yazzie-Mintz, 2010
40. Search Institute, 2018
41. Yazzie-Mintz, 2010
42. American Psychological Association, 2015
43. Education Week Research Center, 2017
44. Harwin & Furuya, 2020
45. See, for example, Osterman, 2000; Goodenow, 1993; Smerdon, 2002
46. Allen et al., 2018
47. Mikami et al., 2017; Wentzel, 2017; Gregory et al., 2016
48. A recent review of 76 pandemic-era surveys found that only 4 drew from representative samples of K-12 students. See Center for Reinventing Public Education, July 2020, [crpe.org/thelens/students-count-highlights-covid-19-student-surveys](https://crpe.org/thelens/students-count-highlights-covid-19-student-surveys)
49. Darling-Hammond et al., 2019

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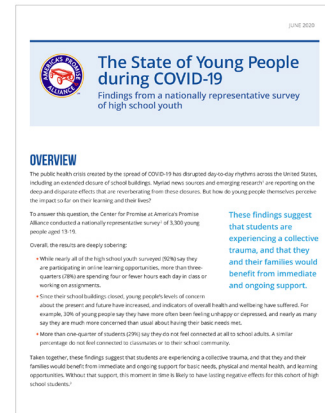
## ABOUT THE HOW LEARNING HAPPENS RESEARCH SERIES

In 2019, following the publication from the Aspen Institute National Commission on Social, Emotional, and Academic Development's landmark report *A Nation At Hope*, America's Promise Alliance launched a rigorous qualitative study focused on young people's experiences of integrated social, emotional, and cognitive learning in six exemplary schools and OST settings. *All of Who I Am* reports on the six interrelated themes young people described as central to their learning experiences within those settings: relationships; belonging; intentionality; agency; meaningful learning; and identity development.

*All of Who I Am* provides important insight into the experiences of 100 young people attending schools and programs that are models for integrated learning experiences. But what about the broader population of young people? Do the experiences described in *All of Who I Am* reflect the experience of most high school youth across the country? In what ways are these conditions related to one another? And do they interact with one another to support more positive learning experiences? America's Promise Alliance conducted a nationally representative survey to explore these questions. *What Drives Learning* reports the related findings.

Since the time of the research and writing of *All of Who I Am*, COVID-19 has shattered life across the United States. *The State of Young People During COVID-19*, a brief drawn from a selection of items in the aforementioned survey, found that during the Spring of 2020 young people were experiencing a collective trauma characterized by disconnection from school peers, adults, and communities; experiencing poorer health; and navigating high levels of concern for their and their family's health, finances, and basic needs.

All of the studies in the How Learning Happens research series advance the Center for Promise tradition of youth-centered research, helping to ground conversations about creating more developmentally responsive learning in the experiences of young people themselves.







## Center for Promise

## HOW LEARNING HAPPENS

### About America's Promise Alliance

America's Promise Alliance is the driving force behind a nationwide movement to improve the lives and futures of America's children and youth. Bringing together national nonprofits, businesses, community and civic leaders, educators, citizens, and young people with a shared vision, America's Promise leads campaigns and initiatives that spark collective action to overcome the barriers that stand in the way of young people's success. Through these collective leadership efforts, the Alliance does what no single organization alone can do: catalyze change on a scale that reaches millions of young people.

### About the Center for Promise

The Center for Promise is the applied research institute of America's Promise Alliance. Its mission is to develop a deep understanding of the conditions necessary for young people in the United States to succeed in school and life. The Center's unique value as a research institute is its dedication to youth voice, whether by highlighting the voices and views of young people or through working with youth to develop and implement research methods to study the issues affecting their lives.

### About How Learning Happens

Science confirms what educators, parents, and caregivers have long known: learning is social, emotional, and cognitive. The most powerful learning happens when we pay attention to all of these aspects—not separately, but woven together, just like how our brains work. Through [How Learning Happens](#), America's Promise Alliance is advancing this understanding about how learning happens and helping to fuel the growing movement to educate children as whole people—combining their social and emotional well-being with academic growth and success. Our effort builds on the work of many organizations and coalitions to advance a whole child approach to learning and development. We do so by developing a shared and inclusive message about how learning happens, sharing this message with a broader audience of stakeholders, infusing the lessons from how learning happens into our signature campaign work, and exploring the perspectives of young people about how learning happens.

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