RESEARCH REPORT

The "Silent Epidemic" Finds Its Voice

Demystifying How Students View Engagement in Their Learning

Samantha E. Holquist, Jared Cetz, Santiago D. O'Neil, Dana Smiley, Laney M. Taylor, and Marisa K. Crowder

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Samantha E. Holquist, PhD, *McREL International*
Jared Cetz, *Oregon Student Voice*
Santiago D. O'Neil, *Prichard Committee Student Voice Team*
Dana Smiley, *Oregon Student Voice*
Laney M. Taylor, *Prichard Committee Student Voice Team*
Marisa K. Crowder, PhD, *McREL International*

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Consulting students to support engagement in their learning

I'm pleased to share this special McREL research report on student engagement, which is unique in several ways: It was researched and written by students supported by McREL researchers, and it is an artifact of a unique moment in modern history, the COVID-19 pandemic of 2020.

The report arose from something we talk a lot about at McREL, curiosity (in this case, mine). How, I wondered, was student engagement—already a too-rare commodity among older students—being impacted by the shifting demands students endured between home, school, and the virtual world? If engagement is a gauge of how connected students are to the school community, what happens to it when the very nature of the community changes suddenly and fundamentally?

McREL researchers Samantha Holquist and Marisa Crowder collaborated with members of student voice organizations in Oregon and Kentucky with whom they had worked previously. The student voice movement seeks to involve students in education decision-making, such as research and policy-making, so that they are full participants in education, not mere objects of adults' decisions.

"With their wealth of firsthand experiences, students should be consulted on research concerning policies and practices designed to support their learning," according to Dr. Holquist. "We partnered with four students to write research questions, draft focus group protocols, facilitate focus groups, analyze data, and write the report. This partnership provided us with a deeper level of understanding about what may be shaping students' engagement in the school community."

Among the many eye-openers in the pages that follow, I was struck that engagement and change seemed to have an inelastic relationship: Students who were highly engaged in bricks-and-mortar school continued to be so in virtual school and vice-versa. This suggests that future research on student engagement should probably delve into the *qualities* of interpersonal interactions that make them succeed or fail rather than dwell on the *site* of the interaction. I think this team's findings will prove valuable to future scholars and practitioners in understanding what happened to schools, and the people in them, in 2020.

Bryan Goodwin, President & CEO

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Introduction

Approximately 40 to 60 percent of America's high school students are chronically disengaged (i.e., inattentive, exert little to no effort, do not complete tasks, and claim to be bored; National Research Council and Institute of Medicine, 2004). Disengagement is so widespread that it has been labeled the *Silent Epidemic* (Bridgeland et al., 2006). Students who are disengaged are not only less likely to both attend school and expend effort in their course work, they are also more likely to misbehave and to drop out of school (Atwell et al., 2019; Balfanz et al., 2007).

Research suggests that engagement in learning drops for students as they get older. A 2013 Gallup poll found that roughly eight in ten 5th-grade students felt engaged in school, while only four in ten 11th-grade students felt engaged.

A silver lining is that disengagement does not occur suddenly; rather, there is a self-confirming cycle of perceived control (that one has influence over one's own success and failure in school), engagement, and academic performance that educators can identify and intervene in (Balfanz et al., 2007; Skinner et al., 1990). For example, a poor mark in a course can lead a student to feel a sense of diminished control over and engagement in their learning, resulting in another poor mark in the course, and so on. Moreover, the situational factors that give rise to this cycle tend to occur more often among America's historically marginalized students, such as low-income students and students of color (Atwell et al., 2019). This suggests that by understanding the intrapersonal, interpersonal, and situational factors that lead to disengagement, educators can develop practices, processes, and policies that keep students engaged in their learning and disrupt this disengagement/diminished academic performance cycle. However, to develop practices that promote student engagement, it is important to get a clear understanding of what student engagement means and the factors that give rise to it.

What is student engagement?

Student engagement is complex and multifaceted. Despite decades of work on engagement, researchers have not reached consensus on a definition. Many researchers acknowledge that engagement includes some level of involvement in schoolwork or school-related activities. For example, Abla and Fraumeni (2019) defined engagement as a condition of emotional, social, and intellectual readiness to learn characterized by curiosity, participation, and the drive to learn more. Fredricks and colleagues (2004) provided some empirical evidence for three separate but related forms of student engagement that support student academic outcomes: behavioral (listening, studying, participating in classroom activities), emotional (enjoyment and positive regard toward schoolwork, peers, and teachers), and cognitive (willingness to apply effort and invest in a task). These three forms highlight the nuanced nature of student engagement, as a student can be cognitively engaged in a lesson but may not display behaviors that would signal to a teacher that they are.

Related to student engagement is the concept of motivation. Motivation has been defined as the explanations for why an individual chooses to engage in one behavior over another (Bargh et al., 2010). Academic motivation refers to the motivating factors that cause a student to persist in their learning, stay engaged in their tasks, and participate in other school-related activities (Wigfield & Eccles, 2000). One of the most prominent theories for explaining academic motivation is expectancy-value theory. This theory posits that students decide to stay engaged in their academics when they expect positive outcomes because of their engagement (Brophy, 2013). These expectations are argued to stem from

their beliefs about ability, sense of self-efficacy, and understanding that doing so will lead to future success, as well as when students value the material due to personal interest, enjoyment, and perceived utility (Csikszentmihalyi et al., 1997; Jiang et al., 2018; Wigfield & Eccles, 2000). Understanding academic motivation is important for understanding student engagement, as it represents an underlying factor that gives rise to the behavioral, emotional, and cognitive components of engagement.

Abla and Fraumeni (2019) defined engagement as a condition of emotional, social, and intellectual readiness to learn characterized by curiosity, participation, and the drive to learn more. Read the Student Engagement white paper.

What promotes engagement?

One consistent finding in the research is that there is no "one-size-fits-all" approach to promote student engagement (National Research Council & Institute of Medicine, 2004). Certain subjects or activities may be enjoyable or cognitively stimulating for some students but not others. Additionally, some students may be more motivated by positive reinforcement from peers whereas others may be more motivated by positive reinforcement from teachers. Moreover, research suggests there are characteristics of the classroom or school environment conducive to motivating and engaging students with different interests and mindsets.

For example, the National Research Council and Institute of Medicine proposed a theory on educational conditions that promote academic engagement. The theory suggests that "the education context [that contributes to academic engagement] is mediated by three sets of psychological factors—beliefs about competence and control, values and goals, and a sense of social connectedness" (p. 34). According to this theory, schools that promote their teachers' professional development, collegiality, and resource needs are going to have teachers who are able and willing to engage in the types of practices that promote their students' engagement. These practices include promoting students' beliefs in their competence and control, aligning students' values and goals with the coursework, and promoting a sense of social connectedness in the classroom (see Abla & Fraumeni, 2019). Further, schools that promote a positive school climate (that is, a safe and supportive learning environment) enable students to develop the mindsets that ultimately lead to engagement (Thapa et al., 2013).

In their review of the research on student engagement, Abla and Fraumeni (2019) share six research-based strategies to promote student engagement:

- monitoring student engagement
- building positive relationships with and between teachers and students
- promoting student autonomy
- using technology
- engaging in effective questioning
- connecting academic content back to the real world

Researchers find that when used together or individually, these strategies can stimulate students' behavioral, emotional, and cognitive engagement in learning.

In addition to these research-based strategies, McREL International recognizes that curiosity is a potential precondition for deep, sustained engagement in learning (Goodwin et al., 2018). Curiosity is rooted in students' desires to explore their surroundings and ask questions about what they and others are experiencing and thinking. As students become more curious about what they are learning in the classroom, they may become more behaviorally and cognitively engaged by asking questions and seeking answers. Therefore, McREL International encourages teachers to support students in building their curiosity to support their engagement in learning.

The Value of Youth and Adult Partnership in Research

Fostering the connections that enable youth and adults to work in tandem on education research is not only mutually beneficial, but it is also a necessary prerequisite to discovering and understanding the experiences of students (Cammarota & Romero, 2010). Adult researchers undoubtedly possess expertise in their field. Because researchers have spent years strengthening their skills and abilities both in theory and in practice, one may conclude that any partnership with youth would simply be a teaching opportunity. However, particularly in education, incorporating youth into the design, implementation, and analysis stages of research projects is vital, as youth possess unique knowledge and expertise on current education policies and practices that may be inaccessible to adults.

Youth have firsthand experience with the current policies and practices designed to support their learning. These experiences enable youth to relate to other students in a different way than adult researchers can. As examples, during data collection, students may be more comfortable sharing their experiences with peers than with adults, and during data analysis, youth may have insights into the experiences students shared that may be missed by adults (Cammarota & Fine, 2008). By bringing together youth's experiences and adults' research skills, youth and adult partnership research allows for the production of more richly nuanced studies that may help practitioners better understand how they can support their students' learning.

The current study

Missing in the research base on student engagement is an understanding of what engagement means from the student's perspective. While research provides evidence for the motivational, behavioral, emotional, and cognitive aspects of engagement for students, existing definitions are missing important elements of engagement that could further promote and encourage student learning. If existing definitions may be missing important elements, then strategies used by teachers to promote engagement may not be effectively reaching their intended goals. This situation further highlights a common practice among educators: designing practices, processes, and policies without a clear understanding of what drives the students that these practices are ostensibly designed to impact. As research has shown, failure to incorporate the experiences of those using and being impacted by a program or practice runs the risk of that program or practice failing to achieve its goal (Chevalier & Buckles, 2013).

In addition to limited understanding of engagement from the student perspective, there is limited research on examining how engagement is defined and promoted in a virtual, K–12 setting—an urgent matter as of this writing, ten months into the COVID-19 pandemic. Much of the research on engagement in a virtual setting has focused on higher education contexts (McBrien et al., 2009; Martin, 2019). While the present study was not originally focused on virtual learning, the pandemic presented a significant opportunity to understand how students' engagement in learning changed as they shifted to virtual learning.

Methods and research questions. To address these research gaps, McREL International partnered with four youth researchers to conduct a qualitative research study to understand engagement from the students' perspective. Four focus groups were held via Zoom with students—who were grouped by the researchers as being either engaged or disengaged—to discuss how they understood engagement.[1] The focus groups took place during July 2020 and were guided by the following research questions:

1. How do students define the construct "student engagement"?
2. What supports and barriers do students experience in engaging in the classroom and at school?
3. Did student engagement in learning shift during the COVID-19 pandemic? If so, how?

Constant comparative analysis was used to identify themes within participants' responses (Guest et al., 2011).[2] In the remainder of this

1 Students were identified as engaged if they answered "all of the time" or "most of the time" to two of the following three prompts on the recruitment survey used to select participants for this study: I feel (a) school work is meaningful, (b) motivated to learn, and (c) engaged in the classroom. Students were identified as disengaged if they answered "some of the time" or "never" to the same prompts.

2 For more information about the methods, see Appendix.

paper, the findings from this study are discussed in three sections, each addressing one of the above questions. Within each section, recommendations to support student engagement are proposed. In the conclusion, high-level findings across the research questions are summarized and a framework for educators and researchers to support student engagement is proposed.

Defining engagement from the student perspective

There is a limited understanding of the concept "student engagement" from the student perspective, which may mean that existing definitions are missing important elements of engagement that could promote student learning. Therefore, this section seeks to address the first research question—how do students define the construct, *student engagement*—by examining the extent to which students' definitions of student engagement were consistent with the existing literature. That is, do students report behavioral, emotional, cognitive, or other forms of engagement in their responses? Because it was difficult for students to explicitly define engagement when asked directly, the study team asked probing questions about what engagement looked like to them. This prompted students to describe multiple forms of engagement as well as multiple supports for engagement, which are discussed in the next section.

Engagement as a cognitive concept. Cognitive engagement refers to a student's internal thought and attentional processes (e.g., interest, problem-solving, critical thinking; Fredricks et al., 2004). Students described their definitions of engagement within the context of the cognitive form of engagement. For example, one engaged student stated, "If I always know what time it is, then I'm not engaged." She added that if she is "looking at the clock and waiting for class to end" then she is not engaged in the work. A disengaged student said that engagement "means that I'm immersed in my learning." Another disengaged student noted that "engagement to me would be genuinely wanting to do the work." The view that engagement is a cognitive concept was further highlighted by students describing that relevant and challenging material got them engaged in their coursework. For instance, an engaged student noted that she has "always had a very specific

career path in mind that I don't need to use any real science [in] . . . so I think it kind of just goes out of my brain because I'm like, I'll never use it again." Students also expressed their desire to be challenged and feel an "aha!" moment in their learning. By reflecting on examples of their own thought processes, these conversations suggested that students define engagement as being cognitively engaged in their work.

Engagement as a behavioral concept. Behavioral engagement refers to the types of overt behaviors that signal to others that a student is engaged (e.g., nodding, asking questions, taking notes; Fredricks et al., 2004). Students also defined engagement in terms of behavior. An engaged student said that "being engaged means actively listening, and taking notes, and asking questions when needed. And if there's discussion, just constantly being in discussion. Just being present in the moment." Another engaged student said engagement involves behaving "in a way that makes it obvious that I'm listening" such as asking lots of questions and requesting clarifications. Providing such examples of behaviors that reflect active participation in class activities suggested that students also defined engagement in terms of their behavior.

Engagement as an emotional concept. Emotional engagement refers to the positive feelings that a student may feel toward a subject or their work (e.g., enjoyment, pride, desire; Fredricks et al., 2004). Defining engagement in terms of emotional engagement was apparent when students described their own and their teachers' interest in the material. For example, an engaged student shared,

> One of my favorite subjects is writing and the reason why I liked my writing class so much is because we did a lot of things relating to stuff that we actually cared about, like writing essays about real world problems or writing poems and other things like that. And I really like writing, because it's one of my favorite ways to express myself.

A disengaged student described the relationship between teachers' emotional engagement and students' emotional engagement when he said,

> The teacher's attitude has the biggest factor on my engagement in the classroom. Simply because if [the teacher is] unengaged from the classroom and they don't really care about the subject or the students, then I just tend to drift away, zone out or just, like, not pay attention as much.

These examples illustrated that students describe engagement in terms of their enjoyment in learning the material, which reflected the emotional form of engagement described in the literature.

Engagement as a social concept. In addition to the cognitive, behavioral, and emotional forms of engagement, students also described socially engaging with their peers and teachers. An engaged student said the key to engagement was "having that sense of connection with your teacher and your classmates, but also having that sense of trust, like, 'I can go and talk to you when something is wrong, whether it's academically related or personally.'" She added that students "want that sense of 'I can go and talk to someone whenever I want to and feel comfortable with everyone in my class.'"

A disengaged student noted,

> I think the only thing that motivated me was my friends and them keeping in touch with me telling me, "We need to finish our work." Because other than that we didn't have any motivation to do anything.

When discussing working on classwork with a friend, another disengaged student shared a similar thought:

> Having a class with friends will definitely make you more engaged. Because me and my friends, we're all athletes so we also do know that grades are important. So, we would be able to talk about outside work while we're doing our work. So I think having friends in the class definitely makes it [easier] to engage because you're going to want to do your work, but you also have something to keep your mind off how hard what you're doing is.

Each of these responses highlighted the importance of being able to interact with peers and teachers within the learning.

Connection between engagement and motivation. Many students described engagement in terms of motivation and often used the terms interchangeably. A disengaged student illustrated how they connect these two concepts:

> Oftentimes, regardless of the subject, if I'm engaged in a subject, I feel a lot more motivated. And when I'm doing my homework, I feel a lot more motivated and I want to do better on those assignments rather than a class that I'm unengaged in that I don't really care about. I feel really unmotivated to do those classes.

This example described a cyclical pattern whereby engagement can promote the motivation to continue to engage in the topic. The student further described how motivation was a reflection of perceived value when he said that athletics and the prospect of graduating "motivated me to do well in school, keep my grades up." In general, students did not describe their motivations in terms of their expectations of performing well (Brophy, 2013). As can be gleaned from the responses shared thus far, students were motivated by their interest in and perceived value of learning (Jiang et al., 2018).

Incorporating students' voices in creating a clearer understanding of student engagement will ultimately support educators in refining and creating practices, processes, and policies that better support their engagement in their learning.

Recommendations for defining student engagement

Students' definitions of engagement included the three components described by Fredricks and colleagues (2004). Students were more likely to explicitly define engagement in terms of cognitive (e.g., thought processes) and behavioral (e.g., asking questions) engagement but noted how various aspects of their learning environment also could promote their emotional engagement (e.g., enjoyment) as well. Students' responses also suggested that there may be an additional form of engagement, social engagement, that may be defined as students' interacting with their peers and teachers (e.g., asking for help, working collaboratively, drawing on their relationships to keep them motivated) to promote their learning. This latter finding has important implications for educational researchers interested in gaining additional insights into how student engagement can be defined and measured and how it's related to student learning.

Further, findings may highlight the need for researchers to build upon this work by collaborating with students in co-developing and empirically testing definitions of engagement to the extent that students' definitions of their own engagement differed from the existing literature. Incorporating students' voices in creating a clearer understanding of student engagement will ultimately support educators in refining and creating practices, processes, and policies that better support their engagement in their learning.

Finally, it is important to note that all these forms of engagement described by the students are related to one another. For example, students described instances in which they were more likely to be cognitively engaged when they enjoyed what they were learning (i.e., emotionally engaged). They also shared that socially engaging with their peers and teachers helped promote both emotional and cognitive engagement. Thus, although there may be instances in which educators see one form of engagement and not another, educators may also find that promoting one form of engagement promotes another. But how can this be achieved? Understanding how students define student engagement is an important first step to promoting their engagement; however, the next step is to understand the factors that promote or impede student engagement.

Supports and Barriers to Student Engagement in Learning

To gain a deeper understanding of how to support engagement, students were asked to describe what types of practices or characteristics in their school or classroom environment either supported or inhibited their engagement. Supports for engagement included a collaborative classroom setting, relating content to the real world, and fostering relationships with teachers and peers. Barriers to engagement included not accommodating students' preferred learning modalities, teaching to the test, and a perceived negative attitude from teachers. This section discusses four factors that support student engagement in learning: class structure, class content, teachers, and the school community. It seeks to answer the second research question: What supports and barriers do students experience in engaging in the classroom and at school? Findings included in this section were chosen based on the concepts or themes that students discussed most often during the focus groups.

Class structure

With students spending most of the school day in a classroom setting, it was no surprise that the structure of each class played a role in promoting or inhibiting student engagement. Class structure was mentioned 121 times when discussing student engagement. Students identified a lack of choice, an overwhelming amount of busywork, and insufficient accommodation for preferred learning modalities as barriers to student engagement, and thus student success. The highest levels of engagement were in classes where the content was presented creatively, discussions were common, and students were afforded frequent opportunities to work with their peers.

Collaboration among peers. Most students (16 out of 19) noted that achieving meaningful engagement with the material by working with peers was important for feeling engaged in the classroom. Discussion-based lessons and group projects were mentioned 26 times in regard to promoting engagement. One disengaged student shared, "If I don't get some interaction [with peers] throughout the lesson, I'm not going to pay attention to the teacher just talking." This doesn't mean that students entirely rejected individual work or teacher lectures to impart wisdom and share information. Rather, they were advocating for discussions and group work to become a regular feature of all classes. One engaged student revealed how "engagement often comes for me when I'm just doing textbook work and [am instead] actively having discussions [and] actively hearing others' perspectives." Students highlighted how they wanted not only to learn from teachers, but also to share their thoughts and ideas and learn from one another. Teachers who provided instruction through group work and discussions helped boost student engagement.

> "If I don't get some interaction [with peers] throughout the lesson, I'm not going to pay attention to the teacher just talking."

Accommodations for students' preferred learning modalities. Students shared how each student's engagement is directly impacted by their preferred learning modality. The need to accommodate students' methods of learning was mentioned 13 times throughout the focus groups. While many students said that regularly incorporating discussions and group work into classes is a way to boost engagement, others disagreed. One engaged student stated they "can't stand" group projects; another shared they "feel more engaged and motivated [and] get a lot more done when I am able to talk to people and work on projects together rather than just by myself." This exchange highlighted how keeping the classroom dynamic and easily adaptable to students' preferred methods of learning and needs may be important for engagement. This notion was supported by students not only through their

disagreements in focus groups but also through one disengaged student's explicit recognition that "everybody learns differently [and] teachers [should] accommodate that so each student can learn to the best of their abilities." A seminar-based class was one student's dream while simultaneously serving as another's nightmare. Ultimately, students desired instructional variety in the classroom to support more students in experiencing engagement, regardless of their preferred learning modalities.

Shifting class structures for virtual learning. Students' identified supports and barriers to engagement shifted when asked about their experiences with virtual learning. Decreased interactions with teachers and peers (mentioned 29 times), a lack of resources (20 times), and increased busywork (13 times) left students struggling to remain engaged and focused. Students in the middle school and disengaged high school focus groups cited unstable internet and a lack of adequate technology as reasons they disengaged from their coursework. One disengaged student expressed how when students "don't have the resources available at home to continue their learning . . . they aren't really going to be motivated to take on harder courses and advance their education." Students highlighted that they may need assistance from administrators and teachers to access resources to engage in learning.

In addition, virtual learning decreased many students' capacity to complete assignments and maintain academic integrity. A disengaged student connected burnout and mental health challenges with an inability to "put in [the] time and dedication I could if I were at school." An engaged student noted the difficulty of completing or caring about assignments when they "can just look all the answers up online and there are no repercussions." Students showed that strategies used in an in-person setting, such as students having a dedicated space to learn and assignments that require students not to use the internet, were difficult to translate into a virtual learning setting.

Class Content

Students also perceived class content as a variable that impacts engagement in learning. Class content was mentioned 98 times when discussing the factors that support or inhibit engagement. Students expressed their desire for teachers to incorporate practical learning, understand students' perceptions of challenging content, and not teach to the test, as important considerations to support students' engagement. Further, students differentiated between humanities (e.g., English, writing, and social studies) and STEM (i.e., science, technology, engineering, and mathematics) courses and how content within these courses affected their engagement. While fault lines between students were sometimes distinguished by a like or dislike of certain subjects, the desire for practical learning was by far the most pervasive finding related to class content in the study.

Practical learning. This study's understanding of the term "practical learning" derives from an engaged student's comment that

> I feel like students would be more engaged if they fully understood what the subject was about and how exactly it could be applied to what they're doing, because if they knew the actual importance of it, then maybe they'd actually take the time to pay attention and learn the content.

Many students who participated in the focus groups expressed a desire to see how their classroom experiences could be applied to contexts outside of school. Practical learning was discussed 41 times when discussing the factors that support or inhibit student engagement. Engagement was even more pronounced when teachers contextualized students' learning experiences within recent events, such as the global pandemic and social unrest in the United States, which were discussed 13 times. For example, one engaged student said, "The classes that brought into light the issues that we're seeing so clearly right now definitely made me feel more engaged." Thus, students expressed their desire to have a deeper

understanding of how the class content could be applied outside the classroom or related to current events, which may be an effective strategy for teachers to increase student engagement.

Understanding students' perceptions of challenging content. Perceived challenge of class content, or whether students found it easy to complete coursework, also shaped students' levels of engagement (discussed 10 times). This was discussed most often among students who were identified as disengaged from their learning experiences. The ease of completing certain assignments was a common thread, as students thought that assignments that were too easy inhibited their engagement in the classroom. One disengaged student shared, "I was really disengaged in foreign language . . . because we all knew the answers were online and the teacher wasn't teaching us. So, we just copy-and-pasted the answers in order to pass." Students desired to be challenged by what they were learning in the classroom and when they did not feel challenged, they felt disengaged.

Transitioning away from teaching to the test. While the concept of teaching to the test was only mentioned eight times within the focus groups, it underlay students' discussions of practical learning and perceived challenge of class content. In relation to practical learning, students spoke of a desire for class content models that went beyond preparing them for an assessment. One engaged student shared,

> We've never been taught in a way that shows us that [the content is] more important than just the tests coming up next week. So, the only time we've ever felt engaged in that sense was just when we knew that we had something to study for.

Students said they wanted teachers to support them "caring about the material" and seeing how it related to their lives outside the classroom. Ultimately, students reported less engagement in classes where teachers anchored units of study to tests rather than project-based learning and performance assessments.

Balancing humanities and STEM teaching strategies. In discussing the content areas that were most engaging to them in school, students mentioned humanities 16 times and science, technology, engineering, and mathematics (STEM) 14 times. Students who reported that humanities classes were more engaging enjoyed being creative, developing their critical thinking skills, and learning for the sake of learning. Students who reported that STEM classes were more engaging enjoyed being able to find solutions to problems, having a clear structure to their learning, and having to do activities—such as labs—in order to learn. While students were more engaged in these content areas for different reasons, there was one thing that was viewed as engaging for students in both content areas: being able to see how what they were learning applied to their future careers. One student who was disengaged but felt both humanities and STEM could be engaging summarized,

> History and science have always been the subjects I give more towards. This is because science includes math and history includes a lot of writing, both of [which] are what I want to do in my future. I want to be a nuclear engineer and then go into politics, so science and history are really the two things I'll need. And the other ones just don't seem interesting.

Like the findings presented in the practical learning section, when students could see the utility for certain content areas in their future careers, they chose to be more engaged in these content areas versus others. When a follow-up question was asked about how to engage students in classes that might not be directly related to their careers, students shared that it might be helpful to bring strategies used in humanities classes, such as creative writing or group discussions, into STEM classes, and to bring strategies used in STEM classes, such as finding solutions to problems and application-based activities for learning, into humanities.

Teachers

Students' perceptions of their teachers were highly complex and multifaceted. Students identified teachers as the single biggest group to support their learning (115 mentions) throughout the focus groups. A teacher's influence extended beyond deciding how to structure a class or present course content. Students highlighted how a lackluster attitude or perceived minimal effort by a teacher could be very disengaging. However, when students felt cared about and supported by their teachers, they felt more inclined to engage.

Teacher attitude and effort. Students acknowledged how a teacher's attitude and effort, which were discussed together, affected their ability to engage in their learning. Teacher attitude and effort was mentioned 25 times in relation to engagement. One disengaged student said "if my teacher doesn't care about [the class] and doesn't care about me, I'm just going to sit there [and] do the bare minimum to get by." Another disengaged student shared that "the teacher's attitude has the biggest factor on my engagement in the classroom" because if teachers "don't really care about the subject or the students then I'll drift away, zone out, or just not pay attention." Students highlighted how teachers have the potential to make a class worthwhile and meaningful to students. When teachers were passionate about a subject or used innovative instructional approaches, students felt more engaged in their learning.

Student and teacher relationships. Teachers further supported students' engagement in the classroom when they cared about the subject matter and the students themselves. Student and teacher relationships were discussed 47 times throughout the focus groups. One engaged student expressed how engagement involved "having [a] sense of connection with your teacher [where you] can go and talk to [them] when something is wrong, whether it's academically related or personal." Students shared how being available and being supportive of students' needs, both inside and outside the classroom, helped establish relationships that supported engagement. For some students, this looked like teachers' understanding of a student's busy after-school schedule, family expectations, or challenges a student may be facing. Students emphasized how every student may need a different level of support from teachers, but providing students with space to develop relationships with teachers, if desired, supported student engagement.

Recognizing student needs. Building on the desire for a strong student and teacher relationship, students also noted that the ability for teachers to recognize and adapt to student needs further supported their engagement. The importance of teachers recognizing students' needs was mentioned 34 times in relationship to engagement. In describing why recognizing student needs is important for engagement, a disengaged student shared,

> Whenever something happens in our family or something like an unfortunate event, it obviously gets teenagers down. We're still learning how to deal with our emotions, so most of our teachers understood that. They were just really understanding that we have personal life, that things happen in our families that we don't necessarily want to talk about, but that we still need support.

Just as students would like teachers to accommodate lessons for students' preferred learning modalities, students expressed that it is important for teachers to accommodate students' learning in different situations. This sentiment was discussed in the disengaged focus group, where students noted that teachers who "understand that we're still teenagers" made school more engaging and enjoyable. However, students also shared that recognizing student needs can sometimes be difficult for teachers, particularly when students were unwilling to talk about what was going on in their lives. Knowing that a teacher was open and willing to provide support if needed provided students with a sense that they were being supported, even if students were not willing to share.

School community

A student's sense of community was critical to supporting student engagement. Within the school setting, four types of people make up these communities: peers (mentioned 28 times), teachers (mentioned 115 times), counselors (mentioned 11 times), and school administrators (mentioned 10 times). However, students differed in the extent to which they perceived how important each stakeholder group was to their engagement.

Peer-to-peer relationships. A student's peers were defined as friends and classmates amongst focus group participants. Students spoke to the social-emotional bonds between peers within their schools. As one disengaged student described the relationship, "My friends kept me motivated in school. I feel like without them, I would have fallen behind. It kind of kept me going." When students had bonds with students in their classes, they felt more comfortable engaging in their learning, particularly in classes that used a discussion-based class structure. Another concept that emerged as being critical in impacting engagement amongst peers was accountability. The importance of peer accountability for students was highlighted by a disengaged high school student who shared,

> In my school, before the next class where there's a test, we are all like, "Oh, we should study. We should have a study session right now. What do you think your grade is, did you study last night?" And it's a sense of accountability, like, "Keep working to keep those grades up."

By working together to hold each other accountable for learning, students were able to support one another in engaging in their learning. In classes where positive student and teacher relationships were not formed, peer bonds became particularly important as students relied on one another to stay engaged in their learning.

Guidance counselors. Students said guidance counselors have some impact on overall perceptions of their learning environment. An engaged student shared how a counselor's presence and behavior could negatively impact a student's engagement and motivation within the larger school ecosystem:

> The counselors at my school, they're more academic counselors than actually emotional counselors. The moment you say something slightly emotionally to them, they call a social worker on you. It's just not really encouraging to open up to your guidance counselor.

In contrast to this student's experience, another engaged student shared,

> When I was in 8th grade we had a student of ours that passed away and this really kind of took a toll on such a small group, and our guidance counselor really came through. And I really appreciated her for that.

These contrasting experiences illuminate how a guidance counselor, much like a teacher, may serve in a dual role of supporting students both academically and emotionally as they navigate their learning and personal experiences. This dual role was seen as important for supporting engagement as students noted how a lack of emotional support resulted in a decrease in engagement.

School administrators. When asked about how school administrators can support engagement, students focused on how administrators built relationships with them individually and handled schoolwide issues. Students shared that administrators who "made deeper connections with students and staff" positively supported student engagement, while administrators who allowed conflict to persist within the school, such as fights between students or disagreements between teachers and students, negatively affected student engagement. In discussing her school administrators, one disengaged student stated, "Our administrators are really supportive. My principal has come to every banquet me and my brother has had. That's really [supporting] student engagement." By celebrating students' accomplishments with them, school administrators were able to build relationships with students and, as a result, support students in engaging in their learning environment.

Recommendations for supporting student engagement

Students desired relationships with adults, such as teachers, counselors, and administrators, who nurture an environment that supports their academic, behavioral, and emotional engagement. Students also expressed a need for flexibility within their classrooms to support different learning preferences and needs. One support that may need to be further investigated is the importance that students place on forming relationships with their peers to support their engagement. There is a large body of research on the importance of student and teacher relationships to support engagement, but less research focused on peer-to-peer relationships (Engels et al., 2016). Following are recommendations for supporting student engagement in learning.

Collaborate with students to identify the support they need to engage in learning. Research shows that students as young as nine years old (i.e., third or fourth grade) can provide meaningful feedback on their learning experiences (Flutter & Rudduck, 2004). Given the variability in students' perceptions toward engagement supports, it may be important for teachers to collaborate with students to identify the supports they need to feel engaged in learning. By identifying these supports early in the school year, teachers may be able to foster a learning environment that meets the preferences and needs of each of their students.

Foster a school environment where students, teachers, administrators, and counselors can build relationships. Research shows that students who have relationships with adults in school, such as teachers, administrators, and counselors, are more likely to be engaged in learning (Klem & Connell, 2004). Further, this study highlighted the potential importance of peer-to-peer relationships on student engagement. Therefore, it may be important for schools to have structures in place to support students in developing relationships with adults or their peers. These structures may include incorporating activities in the classroom for students to work together on projects, using social and emotional learning activities where students can share about their lives with peers and adults if they choose, and holding office hours for students to meet with teachers and administrators to get to know one another better.

Create classroom environments that engage and support students. Students noted how flexibility and empathy from teachers helped support their engagement in learning. To support student engagement, it may be important for teachers to consider the ways in which they can create flexible lesson plans that can enable students to work together or individually depending on their learning needs. Further, when students may be acting differently or expressing hardship in completing work, teachers may want to strive to be empathetic toward students' situations, even if they do not explicitly know what is going on, and collaborate with students in identifying ways to support their learning during that period of time.

Provide students with multiple and diverse options for how they can engage in their learning. Students individually identified different ways in which they prefer to engage in their learning. Students did not identify a silver bullet that a teacher could use to engage all students in the classroom. Instead, teachers may need to create lesson plans that provide multiple and diverse options for students to choose from when engaging in learning. Different options could include class discussions, lectures, homework, individual assignments, and group work. Research shows that providing students with choice in their learning can increase their motivation, competence, and academic performance (Patall et al., 2010).

Connect class content to real-world situations. Class content is more engaging to students when they understand how it can be used outside the classroom, particularly as it relates to their future career goals and plans. Research also shows that

students are more engaged in learning when teachers offer multiple connections between the content and the outside world (Bridgeland et al., 2006). Teachers may want to consider incorporating at least one activity within each unit that requires students to reflect on a real-world application of what they learned. Additionally, teachers could consider creating projects, such as community-based projects, which enable students to practice what they learned in the community.

Incorporate instructional strategies used in humanities classes into STEM classes and vice versa. The reasons students cite for engaging better in humanities versus STEM classes provide insight into the types of content and instructional practices that may support students in engaging in courses that do not normally interest them. Humanities-focused students appreciated being able to be creative, think critically, and explore big ideas, while STEM-focused students liked finding solutions to real-world problems, having structure, and learning through hands-on activities. Incorporating elements normally associated with one type of class into the other—such as building creativity and critical thinking into STEM classes or problem-solving and hands-on projects into humanities classes—may support students in engaging in a wider range of courses.

Student Engagement in Learning During the COVID-19 Pandemic

As with every other facet of students' lives, the COVID-19 pandemic forced drastic changes in their learning experiences; rapidly transitioning from in-person to fully virtual instruction was arguably the most significant of those changes. This new virtual learning environment resulted in varying reactions from students across the United States. This section, which is broken down by noting changes in performance, challenges faced by teachers, and unexpected upsides to virtual learning, seeks to answer the third research question: Did student engagement in learning shift during the COVID-19 pandemic; if so, how? Findings presented in this section were chosen based on the concepts, or themes, that students discussed most often during the focus groups.

Declining engagement and performance

COVID-19 was discussed 59 times in relation to a decline in motivation and performance. Most students (15 out of 19) noted that the

shift to virtual learning negatively impacted their ability to engage in learning at some point during spring 2020. Offering her personal experience, one engaged student recalled that despite having previously been "a straight-A student," the cancellation of in-person school caused such a severe drop of motivation that "I almost didn't pass my classes." Students noted that understanding the effects COVID-19 had on them was a key step in preparing alternative learning environments with realistic and appropriate expectations. Factors students offered for consideration included stress due to changes in mental health, access to learning resources, and communication with teachers.

Focusing on mental health. During the global pandemic, completing schoolwork and fretting over exams took a back seat to dealing with the quarantine's negative impact on mental health. Mental health concerns related to COVID-19 were discussed 10 times as negatively affecting engagement in learning. A disengaged student commented,

> I was disengaged because I think I experienced a lot of burnout and a lot of health issues . . . because I wasn't prepared for COVID. So, when I was doing math classes . . . I couldn't put in that [same] time and dedication I could if I was at school to do the work problems.

It was challenging for students to simultaneously engage in learning and manage the stress that quarantining placed on them. This balancing of priorities resulted in some students choosing to prioritize their mental health over engaging in virtual learning, particularly when supports provided by a physical school environment, such as teachers or counselors, were not directly available.

Lack of access to resources. Other drops in engagement were related to not having access to resources. Students felt that their educators had assumed that all students possessed, or had access to, the same resources that were provided to them at school, such as stable internet, devices to attend virtual class on, and an environment conducive to learning. Limited access to such resources was discussed 20 times in relation to COVID-19 as negatively affecting engagement in learning. Students expressed how the infrastructure provided by schools enables students to complete assignments, receive consistent instruction, and have meaningful contact with instructors. This wasn't the case at home for many. Ignoring educational inequities before the pandemic placed students in a challenging situation when their access to resources was severed. While students acknowledged the challenges schools faced in adapting to a global pandemic and noted how schools were supporting students in accessing resources, they also said building a stronger infrastructure to provide students with increased access to necessary learning resources could support engagement in learning.

Lack of communication with teachers. The transition to virtual learning proved challenging for many teachers, which affected their students. Greater access to teachers for communication during virtual learning was mentioned seven times in relation to COVID-19 as negatively affecting engagement in learning. One disengaged student recalled that during virtual instruction, teachers "only did a Google meet or a Webex call once a week for 20 minutes," making meaningful interaction and instruction challenging. Students noted a decline in both engagement and performance as it was challenging to learn in an environment where teachers were not present or available.

Teacher challenges in virtual learning

As referenced in previous sections of this report, teachers had an impact on the engagement of their students. Similarly, students' ability to engage in virtual learning was also impacted by teachers. But beyond descriptions of personal experiences, students shared a common sentiment: Teachers were not ready. The ability of teachers to transition their class structure to virtual learning platforms was discussed 29 times as a barrier to engagement in learning. An engaged student commented that

"the teachers weren't 100% prepared, because they've never done this before, which I completely understand, because no one was really expecting this to happen." While students were quick to note that teachers were not prepared for the transition to virtual instruction, they also shared many ways in which teachers supported and hindered engagement during virtual instruction.

Teachers who were engaging, continued to be engaging. Many students observed that if a teacher had been engaging in school, they continued to be engaging in virtual learning. A disengaged student shared, "A lot of teachers understood that we're still teenagers, we still have worries and stuff. . . . The support from the teachers that have always been supportive really didn't change that much." Teachers who were empathetic to the experiences of their students prior to COVID-19 continued to be so during COVID-19, which supported students in feeling engaged in their learning. The ability for teachers to recognize and adapt to students' needs was mentioned 25 times in relation to COVID-19. When asked whether teachers had done well during virtual learning, another disengaged student answered,

> The teachers that were impactful do understand that things happen. Just because we're doing virtual work doesn't mean our life necessarily stopped. Just because [school events] got canceled doesn't mean we stop . . . because they want us to be engaged, but again, understood that we have other classes and stuff . . . still going on in our personal life, especially in the middle of a global pandemic.

Ultimately, teachers who supported students through the global pandemic rather than focusing exclusively on class lessons during virtual learning were viewed as more engaging by students.

Teachers who were disengaging, continued to be disengaging. On the other hand, if a teacher had previously been considered disengaging, that continued in virtual learning. Teachers continuing to be disengaging in virtual learning was mentioned 15 times in relation to COVID-19. As an engaged student put it: "I just felt like the teachers that supported me when we were in school were at least decent during quarantine and the ones that just didn't really care, continued that mentality going into coronavirus." Even in content-heavy courses, a disengaged student rued the sense of abandonment, stating that their math teacher

> literally just didn't give us any work . . . just abandoned us . . . never went on a Zoom call, never gave out assignments. . . . When we took our AP test, it was harder for us because we didn't have an engaging teacher.

"I just felt like the teachers that supported me when we were in school were at least decent during quarantine and the ones that just didn't really care, continued that mentality going into coronavirus."

The importance of fostering a learning space conducive to engagement was not pandemic-exclusive: When instructors failed to engage with their students on a regular basis, the lack of engagement was only exacerbated when externalities created less-than-ideal conditions.

Teacher effort supported engagement in virtual learning. There also were ways in which teachers were able to encourage engagement among students. Key among them remained unchanged from in-person instruction: effort. Teacher effort to support learning was referenced 12 times in relation to COVID-19. While students knew teachers would be unprepared initially to face the multifaceted challenges of resuming an incomplete semester online, the perception of them making an effort to find their feet, rather than "giving up," carried value. An engaged student summarized:

> When we first started, the teachers, they kind of just threw stuff at us, but I think that once we got into the second and third week, and they saw, OK, so and so is doing their work, so and so doesn't understand it—they were able to help us where we needed it. And so I think that once they're able to kind of see where we're at, then they'll get better.

Students observed how teachers would adapt their lessons, and they appreciated the extra effort teachers put in to ensure students were not left behind during virtual learning. Students also understood that adapting to a new learning environment was a two-way street, underscoring the importance of the human side of teaching versus the technical side.

Increased time for student learning

With virtual learning being instituted nearly universally across the United States, one thing students were not lacking was time. When asked what elements of virtual learning should carry over into in-person instruction, students explained that one thing that virtual learning had given them was more time to complete work and opportunities for office hours with teachers. The positive benefits of more time for completing work and office hours with teachers was mentioned 14 times in relation to activities students would like carried over from COVID-19. Building in more time, more "opportunities to have extra study sessions" that occur "multiple days" instead of one day before a test was seen as a positive that could help engagement in the classroom. As one disengaged student stated, "That's what happened during online school, where it was multiple times [to complete study sessions and meet with teachers]. But during school we didn't really have that option." Virtual learning provided more time for students to engage with the content in multiple ways, which deepened their engagement in learning.

Too much busywork. While there was more time, students were simultaneously struggling with "busywork"—assignments that tend to be time-consuming yet yield little educational value in students' opinion. Busywork was mentioned seven times in relation to COVID-19. In response to a question concerning what teachers and administrators could do better based on the students' virtual experience, a disengaged student summarized ways to move away from busywork:

> Give the work ahead of time . . . maybe give a project or like a week's worth of work at a time and variants that you can work with a partner once in a while. Something that's more than just individual busywork.

By getting the work in advance and having more time to complete it, students were able to better understand the intentionality and purpose of assignments, and thus viewed it as more engaging.

Recommendations to support student engagement during and after the COVID-19 pandemic

As students experienced virtual learning in spring 2020, most for the very first time, shortcomings in the learning infrastructure were exposed. Students felt a decline in engagement and performance; observed the challenges teachers faced in transitioning to virtual learning and how these challenges in turn affected their own learning; and saw how more time for learning benefited their engagement. In viewing this unprecedented experience as a learning opportunity, students identified several key areas of improvement to both boost their engagement and make learning more accessible. In the following, recommendations for improving both virtual and in-person learning that emerged because of the COVID-19 pandemic are summarized:

Support students in accessing resources for virtual learning. As noted by researchers and the students participating in the focus groups, the transition to virtual learning brought into focus many of the structural inequalities students were facing daily in their school (Lieberman, 2020). Students' struggles to submit virtual assignments were exacerbated by virtual learning, but certainly not unique to it. Managing to bridge the technology gap (e.g., access to the internet and a computer) among students is critical for providing more equitable engagement in learning.

Build virtual communication infrastructure with students. Research shows that students need clear communication structures to understand and respond to changes occurring in their learning environment (Holquist, 2019). Learning does not end when students leave the classroom. Being able to maintain open lines of communication with adults, such as teachers, administrators, counselors, as well as peers, allows students to feel more comfortable and prepared to learn. These communication structures become even more important during virtual learning, when access to adults and peers is not immediately available and students are navigating a new learning environment. Important communication structures highlighted by students included weekly office hours, email updates, and feedback forms.

Show students that you care. Research shows that caring and empathetic teachers create positive learning environments to support student engagement (Cooper, 2011). During the transition to virtual learning, the most engaging teachers, according to those participating in the focus group, were those who acknowledged students' experiences inside and outside of the classroom as legitimate and important. When a warmer and more human relationship is formed between a student and a teacher, students feel more comfortable to show up to virtual classes and participate.

Normalize and promote "meal prep" style assignments. Overall, busywork was seen as disengaging for students. Students shared that they were more engaged when teachers provided a list of assignments at the beginning of the week and then explicitly connected each assignment to a lesson taught during the week. For example, if the week's science lessons are on metamorphosis, a teacher could provide a worksheet to students on Monday that covers different topics that students will be learning about metamorphosis (such as the stages, habitats, and types of insects). Then, throughout the week, students can fill out the worksheet as they learn the lessons. According to focus group participants, these "meal prep" style of assignments allowed students to work through the assignments at their own pace and understand how they connected to their learning. When work is prepared and given in advance by teachers, students gain a sense of trust in their teachers' ability and a deeper understanding of how assignments build off one another. This may help teachers avoid the pitfall of having students feel disengaged because they perceive lessons as busywork.

Conclusion

This qualitative research study was a collaborative effort between McREL International and four youth researchers to understand engagement in learning from students' perspectives. Students' definitions of engagement aligned with existing research as they described different aspects of behavioral, emotional, and cognitive engagement (Fredricks et al., 2004; Bargh et al., 2010; Abla & Fraumeni, 2019); however, they may have also identified a fourth form of engagement, social engagement, as they discussed how peer and teacher relationships play an important role in supporting their engagement. Additionally, students highlighted several supports to their engagement in learning, which included: (a) flexibility in the classroom to support different learning preferences and needs, (b) connecting class content to real-world situations, and (c) relationships with peers and adults in the school. Students also shared how the transition to virtual learning in spring 2020 due to the COVID-19 pandemic resulted in a decrease in their engagement in learning. This decrease was largely caused by an increased focus on prioritizing their mental health, an inability to access resources, and a lack of communication with teachers. Based on the findings of this research, two main takeaways were identified: (a) engagement is collective and (b) an updated framework for practitioners and researchers to consider may be needed as they strive to support student engagement.

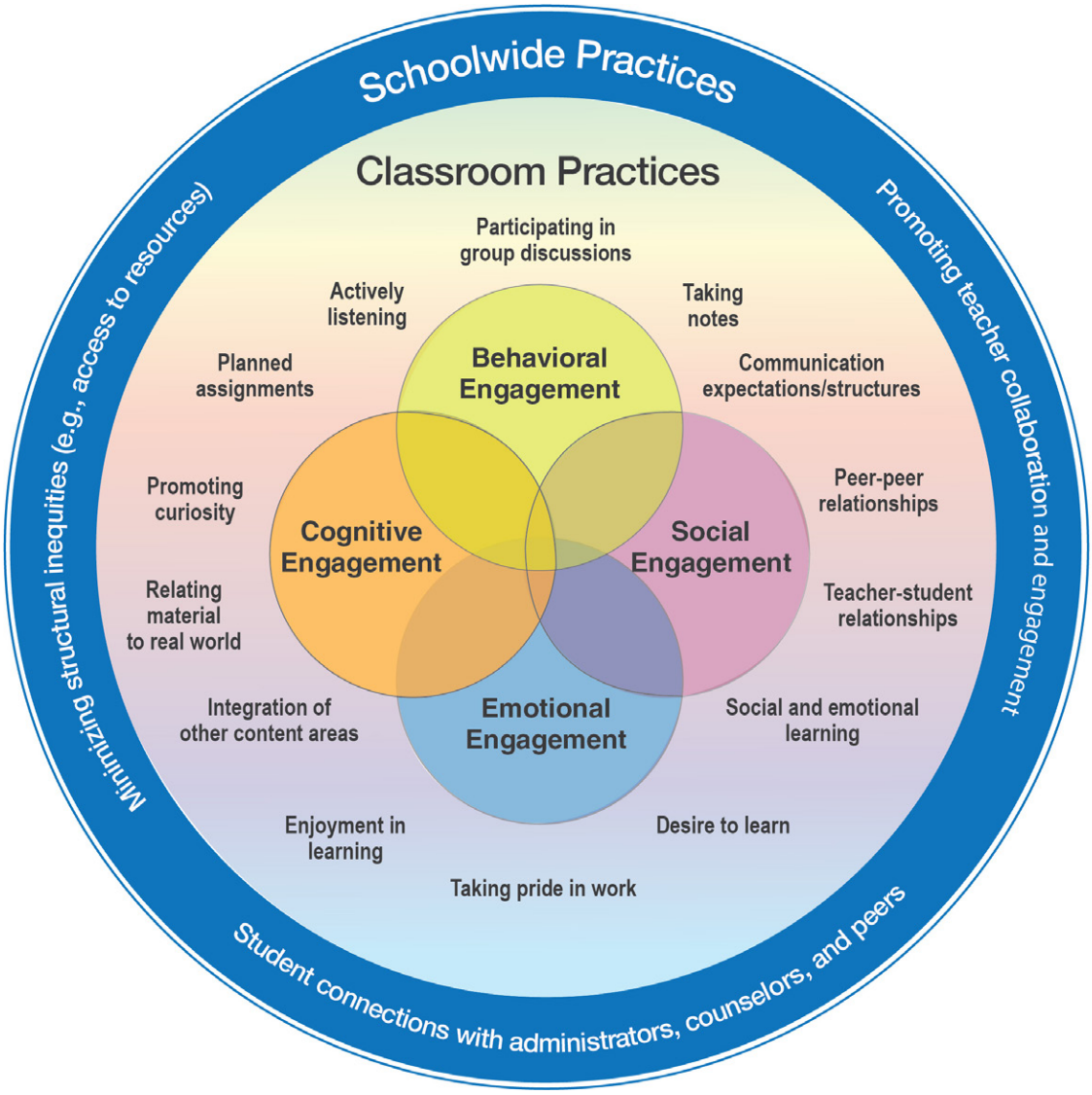
Engagement is a collective effort

While students individually identified different supports and barriers to engagement, there was one common concept that undergirded their experiences with engagement: ***Engagement was seen as a collective effort that required the participation of many actors; multiple, different structures; and a multitude of strategies.*** Students desired relationships with peers, teachers, counselors, and administrators who supported both their academic and emotional engagement. Furthermore, they needed flexibility within their classrooms to support their preferred learning modalities and needs. The changes to learning brought on by the COVID-19 pandemic further illuminated the concepts of engagement as a collective effort as students struggled to engage in learning for a multitude of reasons.

In striving to understand the many different aspects of engagement, it may be important for educators and researchers to consider how to effectively fit the individual pieces that support student engagement, such as peer and teacher relationship or applying connecting class content to the real world, together to create an environment in which students can engage in learning. This school and classroom environment will look different based on the students whom a school is serving, and it may change year after year as new students enter the school. This is not a novel idea, but one that is extremely important for consideration as practitioners and researchers seek to support the diverse needs of all students.

Finally, in striving to design environments where students can engage in learning, educators and researchers may want to consider collaborating with the students they serve to ensure the environment meets their needs. As this study and existing research (Flutter & Rudduck, 2004; Holquist, 2019; Mitra, 2014) have shown, students often know what they need to engage in the classroom and have ideas for teachers on how to support their engagement; however, students are rarely asked to share their thoughts and ideas. When directly asked, every student who participated in this study could articulate what engagement meant to them and/or the strategies that support their engagement in learning. Based on this study's findings, a powerful question is raised: Is disengagement a *Silent Epidemic* because educators aren't asking students how they can support them? This study proposes that this is the case with at least some students, and as a result, educators may not be taking explicit actions that students perceive to be engaging.

Figure 1: Proposed Framework for Guiding Practice and Research on Student Engagement



Proposed framework for guiding practice and research on student engagement

To support educators' and researchers' efforts to further understand student engagement in learning, a proposed framework was created based on this study's findings and drawing on existing literature. In this framework (detailed in Figure 1) student engagement is conceptualized as four separate but related dimensions (illustrated by the four overlapping circles in the middle of the figure). The first three align with work by Fredricks and colleagues (2004). Behavioral engagement refers to the types of overt behaviors that signal to others that a student is engaged (e.g., nodding, asking questions, taking notes). Cognitive engagement refers to a student's internal thought and attentional processes (e.g., interest, problem-solving, critical thinking). Emotional engagement refers to the positive feelings that a student may feel toward a subject or their work (e.g., enjoyment, pride, desire). The fourth circle represents social engagement.

The inclusion of social engagement reflects the importance students placed on social connections and relationships when they discussed engagement in learning. There is reason to justify social engagement as a separate dimension from behavioral, cognitive, and emotional engagement. On the one hand, social interactions include engagement-related behaviors (e.g., asking for help). However, social engagement also seems to be distinct from behavioral engagement in that it requires students to rely on their social (peer-to-peer) relationships to keep them motivated, suggesting that being socially engaged in learning may be much more than behavioral engagement. This relationship between social and behavioral engagement is similar to the relationship between emotional and cognitive engagement, as students are more likely to be cognitively engaged when they are emotionally engaged. Therefore, the constructs may be interrelated and interdependent with one another. Future research is needed to examine whether social engagement is in fact a separate dimension or a sub-dimension of behavioral engagement.

The framework also illustrates how engagement reflects a collective effort from multiple actors and structures. Further, it highlights how there is no one-size-fits-all approach to promote student engagement and there are many entry points for enhancing student engagement. There are myriad practices that teachers can use to create a learning environment conducive to multiple forms of engagement (reflected in the "Classroom Practices" ring in the figure). For example, teachers may want to consider adopting several practices, such as relating class content to the real world and promoting peer-to-peer relationships to facilitate cognitive and social engagement, respectively. Other practices, such as social and emotional learning strategies, can address both social and emotional engagement in learning. Given the relationships across the four dimensions of engagement, one practice may promote several types of engagement. However, because one size does not fit all for student engagement, we recommend adopting at least one type of practice per dimension to create a learning environment that is conducive to engagement for all learners. We also recommend regularly reviewing and assessing these practices to see if they are supporting student engagement and, based on results of these reviews, adjusting practices to better support the engagement of students not benefiting from current practices.

The outermost ring of the figure aims to reflect the fact that classroom practices are influenced, at least in part, by the structures, practices, and policies of the broader school environment. For instance, students cannot be engaged in their learning if they do not have access to resources. Teachers may not be able to promote engagement in the classroom without the proper professional learning and social-emotional supports for doing so. Further, student engagement is also promoted by their relationships to the broader school community. Thus, school structures, practices, and policies that support a classroom environment conducive to student engagement and promote relationships among members of the school community are important for this work.

This framework provides one way to conceptualize engagement and provides a starting point for considering how social engagement may be different from cognitive, behavioral, or emotional engagement. As noted previously, it may be beneficial for educators and researchers endeavoring to deepen their understanding of engagement to collaborate with students. By collaborating with students, educators and researchers may be able to gain clearer insights into what engagement means to students as well as the strategies that promote student engagement. This collaboration may help give voice to the *Silent Epidemic* that is student disengagement. ■

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Appendix: Methods

McREL International partnered with four youth researchers to conduct a qualitative research study to understand engagement from the students' perspective. Four focus groups were held via Zoom with students who self-identified as being engaged or disengaged to discuss how they defined engagement for themselves. Constant comparative analysis was used to analyze data to identify themes within participants' responses (Guest et al., 2011). This work was guided by the following research questions:

1. How do students define the construct "student engagement"?
2. What supports and barriers do students experience in engaging in the classroom and at school?
3. Did student engagement in learning shift during the COVID-19 pandemic? If so, how?

Youth-adult research partnership

To truly understand the experiences of students, it is important to include students in the research process (Cammarota & Romero, 2010). Although measures of student success are often used as points for discussion on how to improve education, changes that stem from these discussions are made on behalf of students without much effort being taken to include students' perspectives (Walls & Holquist, 2019). Engaging students in research provides students with an opportunity to not only share their voice, but also deeply engage in the research process and take ownership of the outcomes that guide changes that are intended to support student learning (Cammarota & Romero, 2010). Further, when youth conduct interviews and focus groups with their peers, participants are more likely to feel comfortable sharing their experiences than they would with an adult (Cammarota & Fine, 2008). Finally, student engagement in research is seen as a more equitable approach to affecting reforms in school communities, as it provides an avenue for students' experiences, particularly those of underrepresented youth, to be brought to the forefront (Walls & Holquist, 2019).

Two adult researchers partnered with four youth researchers to conduct the study. Two youth researchers were members of Oregon Student Voice and two were members of the Prichard Committee's Student Voice Team in Kentucky. Both organizations promote the inclusion of student voices in education decision-making in their respective states. The four youth researchers partnered with the adult researchers in the study's research design, instrument design, instrument administration, data analysis, findings interpretation, and report writing.

Analytic sample

Fifteen high school students and four middle school students were purposefully selected to participate in the study. Students were recruited through an electronic survey. The electronic survey asked students a series of questions to capture their interest in participating in a focus group, their demographic information (e.g., age, gender, race/ethnicity, and grade), academic information (e.g., self-reported gifted and talented, favorite subject, and future plans), and their self-reported level of engagement in school (e.g., whether they felt schoolwork was meaningful, whether they were motivated to learn, and whether they were engaged in the classroom). The electronic survey was distributed through the social media platforms of youth-serving organizations located across the United States. In total, 43 high school students and 12 middle school students filled out the survey and indicated that they were interested in participating in a focus group. Most of the students who filled out the survey indicated that

they were female (71 percent) and gifted and talented (71 percent), which resulted in most of the study participants also belonging to these two groups.

Twenty students were selected from the 55 survey respondents to participate in the study. To ensure diversity in the sample, students were purposefully selected based on the information that they shared in the electronic survey. Students were first divided by their grade (i.e., high school or middle school) and self-reported level of engagement in school (i.e., self-reported engaged or disengaged).[3] Students were then selected for one of the four focus groups based on their self-reported race/ethnicity, gender, state of residence, favorite subject, gifted and talented, future plans, school size, and school type (public, charter, or private). After being selected to participate in the focus group, students or their guardians were emailed consent and assent forms to sign and return.[4] Once signed consent and assent forms were returned, they were scheduled to participate in one of four focus groups based on their grade and self-reported level of engagement. One middle school student selected to participate in the study did not return a signed consent form and therefore dropped out of the study. Table 1 on the following page provides an overview of selected self-reported demographic information for the 19 students who participated in a focus group.

3 Students were identified as engaged if they answered "all of the time" or "most of the time" to two of the following three prompts on the recruitment survey used to select participants for this study: I feel (a) school work is meaningful, (b) motivated to learn, and (c) engaged in the classroom. Students were identified as disengaged if they answered "some of the time" or "never" to the same prompts.

4 This study received approval from McREL International's Internal Review Board.

Table 1: Selected Self-Reported Demographic Information of Selected Study Participants

	Engagement Level	Grade	Gifted/ Talented	Race/ Ethnicity	Gender	State	Favorite Subject
Focus group 1: Engaged high school students							
Student 1	Engaged	12	Yes	Multiracial	Female	Kentucky	Government
Student 2	Engaged	11	Yes	Black or African-American	Female	Virginia	Math
Student 3	Engaged	9	No	White	Female	Massachusetts	History
Student 4	Engaged	11	Yes	Central & South Asian	Female	Texas	Math
Student 5	Engaged	10	Yes	White, Latinx, Hispanic, or Spanish Origin	Male	Florida	Social Studies
Focus group 2: Disengaged high school students							
Student 1	Disengaged	10	Yes	Black or African-American, Latinx, Hispanic, or Spanish Origin	Female	Kentucky	History or Science
Student 2	Disengaged	11	Yes	Latinx, Hispanic, or Spanish Origin	Female	Texas	Social Studies
Student 3	Disengaged	12	No	White	Non-binary or gender non-conforming	Washington	Math
Student 4	Disengaged	10	Yes	Central & South Asian	Female	Kentucky	Science
Student 5	Disengaged	10	Yes	White	Male	Arizona	Math
Focus group 3: Mixed engaged and disengaged high school students							
Student 1	Engaged	9	Yes	White	Female	Minnesota	Social Sciences
Student 2	Disengaged	12	Yes	Middle Eastern or North African, Multiracial	Female	Nevada	Math
Student 3	Disengaged	12	Yes	East Asian	Female	Texas	History
Student 4	Disengaged	12	Yes	White	Male	Louisiana	Math
Student 5	Engaged	10	Yes	Central & South Asian	Female	Kentucky	Government
Focus group 4: Mixed engaged and disengaged middle school students							
Student 1	Engaged	8	No	Black or African-American	Female	Oregon	Math or English
Student 2	Disengaged	8	Yes	White	Male	Arizona	Math
Student 3	Engaged	7	Yes	Black or African-American	Female	Illinois	Art
Student 4	Engaged	8	Yes	Multiracial	Female	Oregon	Social Studies

Data collection

Data was collected for the study through four focus groups. Focus groups are an important qualitative approach to gain insights for small, demographically diverse groups of students on their experiences (Bogdan & Biklen, 1997). Students were placed into one of four focus groups based on their self-reported grade and level of engagement. The four focus groups were: engaged high school students, disengaged high school students, mixed engaged and disengaged high school students, and mixed engaged and disengaged middle school students.[5] Focus groups took place over Zoom during July 2020. They were facilitated by two youth researchers and were semi-structured to allow space for students to share their experiences. Following are examples of the prompts that were asked during the focus groups:

- What makes you feel motivated to participate in school?
- Do you feel more engaged when learning about certain subjects? Why do you think that is?
- Do you feel supported by the teachers at your school? If so, what specifically do they do to make you feel supported?
- Do you feel supported by school leaders or other adults at your school? If so, what specifically do they do to make you feel supported?
- What (if anything) in your personal life affects your engagement in school?
- For you, what does it mean to be engaged in the classroom?
- What practices did your teachers or school leaders use during COVID-19 to support your engagement?

Data analysis

Constant comparative analysis was used to analyze data from the focus groups (Guest et al., 2011). This analysis involved breaking down participants' responses into discrete "concepts," or codes, that were deemed significant to the study's focus by the researchers. These codes were then discussed, grouped, and re-grouped to form higher-level themes across participants' responses to provide a coherent explanatory model of how students may perceive different aspects of engagement within the study. Dedoose was used to code for themes across the four focus groups.

The four youth researchers took a first pass at coding participants' responses. The youth researchers coded responses and met four times over a two-week period to discuss the identified codes, reconcile differences as needed, and organize codes into higher-level themes. Over the following two weeks, the adult researchers took a pass at coding by reviewing the already identified codes and identifying new codes. The adult researchers met with the youth researchers twice over these two weeks to discuss the identified codes, reconcile differences as needed, and re-organize codes. Finally, to ensure interrater agreement, a random sample of 25 percent of responses from each data source was selected to be independently coded by two adult researchers (Creswell, 1998). Coded responses with an interrater agreement of less than 0.80 were discussed and reconciled as needed. Discrepancies were discussed until coders reached 100 percent agreement. Table 2 on the following page details the final codebook for this study. ■

5 There were few differences in how self-reported engaged and disengaged students responded. Where there were differences, they are explicitly noted in the findings. The lack of differences may be due to the concept that engagement in learning is a continuum and students may have felt engaged or disengaged in the moment that they self-reported, but this engagement or disengagement was not a constant. Therefore, how students self-report in terms of engagement may not influence how they perceive engagement.

Table 2: Codebook Frequency Table

Note: Indentations in the table below refer to child codes that were organized beneath parent codes. Parent codes indicate high-level themes, whereas child codes indicate themes that were identified within high-level themes.

Name	Sources	References
Class content	4	98
Inhibits	3	38
Perceived challenge	*2*	*10*
Teaching to the test	*4*	*8*
Subject	4	33
Humanities	*4*	*16*
STEM	*4*	*14*
Supports	4	65
Current events	*2*	*13*
Enjoyment	*4*	*6*
Practical learning	*4*	*41*
Class structure	4	121
In-person	4	67
Barriers	3	11
Choice/agency	*3*	*5*
Supports	4	8
Accommodating learning modalities	*4*	*13*
Active learning	*3*	*14*
Discussion-based lessons	*3*	*15*
Group projects	4	*11*
Virtual	4	59
Barriers	4	49
Busywork	*4*	*13*
Internet access	*3*	*14*
Interaction	*4*	*29*
Quiet space	*2*	*6*
COVID-19	4	59
Mental Health	2	10
Support	4	26
Communication	*3*	*7*
More time/office hours	*4*	*14*
People	4	168
Administrators	2	10
Classmates	4	28
Friends	*2*	*6*
Student-student academic support	*4*	*11*
Counselors	3	11
Family	3	6
Teacher	4	115
Teacher attitude/effort	*2*	*25*
Teacher-student relationship	*4*	*47*
Teaching skill/style	*4*	*74*
Communication	4	10
Recognizing student needs	4	34

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4601 DTC Blvd., Suite 500, Denver, CO 80237-2596
800.858.6830 • www.mcrel.org