Final Research & Evaluation Report

Increasing Diverse Learner Engagement & Achievement (IDLEA) Project

Prepared By:

Apex Evaluation

Catherine Wolfe Bornhorst, Evaluator
Chelsea Henkel, Evaluator

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Apex is a consulting and technology services company specializing in systems evaluation.
We have been serving the public and nonprofit sectors for over two decades, providing program planning, evaluation, facilitation, and technical assistance, including technology for data collection and reporting. Our vision is "evaluation that works" and our mission is learning. We believe effective evaluation practices and use of data help organizations change systems, policies, conditions, and behaviors at the individual, community, organizational, and governmental levels.

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Background and Context

Background on RISE IDLEA Funding

In March 2020, Coronavirus disease 2019 (COVID-19) forced schools and school districts across the world to close their doors to slow the spread of the extremely contagious virus, immediately placing teachers, students, and caretakers into new and uncertain roles. Teachers were required to entirely shift to teaching online with limited direction and resources, while students and caretakers found themselves in a similar scramble to find new ways to continue in their educational endeavors as best as possible.

While the world continued to change in response to COVID-19, the need for students to be engaged and motivated in their academic pursuits as well as socially connected to classmates and teachers remained critical. Recognizing this need, states across the country mobilized additional funding opportunities. In October 2020, the State of Colorado issued a funding opportunity for a Response, Innovation, and Student Equity (RISE) Education Fund which sought applications that address the learning challenges related to the economic, social, and health impacts of COVID-19. Specifically, the funding was to support high-needs school districts, charter schools, and public institutions of higher education to address impacts of COVID-19 in a manner that creates lasting, sustainable innovations that improve student learning, close equity gaps, and enhance operational efficiency for PK-12 through higher education.

In response to the funding opportunity, the Colorado League of Charter Schools, in partnership with external research and evaluation partners, formed a cohort of 13 schools to particularly focus on increasing student engagement for diverse learner populations, defined as students who fall into at least one of four categories: students with disabilities, English Language Learners (ELL), gifted and talented students, and students who qualify for free or reduced-price lunch (FRL). The FRL category is widely viewed as a proxy indicator for both poverty and trauma.

Titled "Increasing Diverse Learner Engagement and Achievement" (IDLEA), the project utilized innovative and practical approaches to help make sense of the challenges of engagement and better serve diverse learners in cohort schools across Colorado. The project was a response to both the immediate effects on engagement because of the COVID-19 pandemic, but it recognized concerns for student engagement cannot be entirely blamed on the immediate switch to remote delivery model of schooling. IDLEA acknowledges engagement is about more than attendance, time on task, or having your camera on in a Zoom session. A narrow focus on remote learning as the culprit of student disengagement ignores the larger conditions that contribute to successful engagement, especially for diverse learners.

IDLEA Research Basis

THE IDLEA Project included 13 charter schools across Colorado. The schools were diverse in geographic location, educational philosophy, and student populations, providing a rich setting for project implementation and evaluation. Because of this diversity, cohort schools interpreted and focused on student engagement in multiple

ways, including how students understand themselves as learners and participate in their learning environments (online, in-person, or hybrid). However, the project benefited from a central definition of student engagement and other considerations.

What is student engagement?

The IDLEA project broadly defined the term "engagement" as a student's active investment in a task or learning environment. Unlike other efforts directed to increasing or supporting student engagement, IDLEA founded the project on current research[1] and sought to further understand and contextualize engagement through three engagement domains—behavioral, cognitive, and emotional—so that schools can better identify and address the root causes of specific engagement challenges their schools were facing. Considering student engagement as multi-dimensional aligns with current research, which has attracted increased attention in response to the COVID-19 pandemic.

Behavioral engagement refers to observable qualities of how students look and actively participate in their learning environment, to even include participation in school-related activities such as athletics or afterschool clubs. Often times, behavioral engagement looks like "following the rules" or adhering to classroom norms such as raising one's hand, sitting quietly, and making eye contact with the teacher. When students follow these classroom norms, educators often assume students are "on-task" and are demonstrating effort and concentration related to their learning tasks.

Of the two other domains, cognitive engagement most directly focuses on the learning task or a student's actual intellectual commitment to comprehension of materials or concepts presented to them. Cognitive engagement is most often referred to as investment in learning, where students might demonstrate an eagerness to learn new materials or willingness to do challenging classwork. Students who are cognitively engaged are likely to persist despite failure, and continue to invest their effort toward mastery of skills or knowledge, creating connections among ideas as well. In schools, students who are cognitively engaged are often referred to as "highly motivated" or "hard workers" that demonstrate the mental effort required to academically succeed.

While attention toward emotional engagement was growing prior to the COVID-19 pandemic, the effects of isolation and societal upheaval have pushed schools to center how students emotionally attend to their learning environments.[2,3] Emotional engagement is distinct in its emphasis on how students feel and are valued in classroom and school settings. This includes how students emotionally react to teachers and being in a classroom or in school overall. Often, emotional engagement indicates the degree to which students feel they belong in their classroom or school environment. This includes their connection with peers and adults alike as

[1] Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of the Research. 74(1), 59-109.

[2] Jackson, C. K., Porter, S. C., Easton, J. Q., Blanchard, A., & Kiguel, S. (2020). School effects on socio-emotional development, school-based arrests, and educational attainment. National Bureau of Economic Research, Working Paper No. 26759. Retrieved: https://www.nber.org/system/files/working_papers/w26759/w26759.pdf

[3] Aucejo, E. M., French, J. F., Ugalde Araya, M. P., Zafar, B. (2020). The impact of Covid-19 on student experiences and expectations: Evidence from a survey. National Bureau of Economic Research, Working Paper 27392. Retrieved: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7451187/

well as their reaction to assignments, activities, and other areas of their academic lives. Students who report feeling respected and valued in their learning spaces are considered to be emotionally engaged.

As described previously, examining engagement through behavioral, cognitive, and emotional domains helps to further understand and encapsulate the qualities related to engagement. However, it is critical to understand engagement beyond single components. In reality, student engagement is the result of a dynamic interplay across all three domains. It is impossible to separate a student's behavior, emotion, and cognition.

Why is student engagement important?

Decades of research demonstrate that higher engagement leads to higher achievement, holding true across all subject areas and grade levels[4,5,6]. Researchers broadly agree student engagement is key to student's overall success and predictive of short-term learning and achievement and longer term patterns of attendance, retention, graduation, and academic resilience. Ultimately, "students who are engaged in school are both more successful academically and more likely to avoid the pitfalls of adolescence," referring to engagement as a protective factor against risky behaviors such as substance abuse, delinquency, and even risky sexual behavior.[7]

Engagement is undoubtedly critical for all students at every point of their academic and professional journey. Today, the continued impact of COVID-19 presents new and devastating hurdles to student engagement for students across the world, and yet, research had documented a steady decline in students' engagement with schooling well before the pandemic. This decline includes a loss in "interest, enthusiasm, and intrinsic motivation for learning in school, beginning in kindergarten and continuing until they complete high school (or drop out)."[8]

For students in ethnic and racial minority and low socioeconomic status groups, this decline is even more dramatic, and as technology demands for teachers and students has created barriers to student engagement, the pandemic has exacerbated well-documented opportunity gaps between low-income students and their economically better-off peers.[9,10] In 2020, a survey from Arizona State University found lower-income students were 55% more likely to have

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[4] Lahaderne, H. M. (1968). Attitudinal and intellectual correlates of attention: A study of four sixth-grade classrooms. Journal of Educational Psychology, 59(5), 320-324.

[5] Cobb, J. A. (1972). Relationship of discrete classroom behaviors to fourth-grade academic achievement. Journal of Educational Psychology, 63(1), 74-80.

[6] Skinner, E. A., Zimmer-Gembeck, M. J., Connell, J. P. (1998). Individual differences and the development of perceived control. Monographs of the society for research in child development, 254 (63).

[7] Skinner, E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? Journal of Educational Psychology, 100(4) 765-781.

[8] Ibid.

[9] Ibid.

[10] Garcia, E. & Weiss, E. (2020). Covid-19 and student performance, equity, and U.S. education policy. Economic Policy Institute, Washington, D.C.

delayed graduation compared to higher-income peers as a result from the pandemic.[11] With a focus on diverse learners, the IDLEA Project explicitly sought to better define and understand these challenges and support schools in creating successful conditions for diverse student engagement.

IDLEA Project Design

The IDLEA Project was founded on a simple aim—to increase engagement among diverse learners in order to address the challenges of the COVID-19 pandemic and help close the achievement gap between them and their peers. To achieve this aim, the Project Planning Team in partnership with external evaluators and researchers engaged in extensive planning and a phased implementation approach. The following table details the project timeline, and instruments developed as part of the project are described in greater detail further in this report. It is important to note that the table and ensuing description of project activities only represent those directly related to external evaluation responsibilities. For example, classroom observations and engagement rubrics were conducted separately, though the data was also used for school-based decision making.

Table 1: RISE Project Activities – Timeline & Overview

Date	Overview of Implementation Activities
Winter 2020	Invitation and selection of cohort members, finalize planning pending award notice
January 2021	Finalize budget, confirm project leadership/management team, selection of external research and evaluation partners
February 2021	Project Kick-Off and overall orientation, introduction of key members for project and school-based leadership teams
March-April 2021	Development and administration of Student Engagement Assessment (SEA) and Mental Model Survey (MMS) for school staff (administrators, teachers, and students).
May-July 2021	MMS and SEA reports shared with cohort schools. Changes made to SEA and MMS based on school feedback and review of data. School-based selection of engagement strategy, including Universal-Design for Learning (UDL), Increasing the Cognitive Lift, and Cooperative Learning. School-based professional development offered on selected strategy.
August 2021	Beginning of 21-22 SY, selected engagement strategy and interventions in place for SY
September-October 2021	Student SEA deployed, two versions for upper grades (6-12 grade) and lower grades (1-5 grade), external evaluators share reports with school leaders
December 2021-January 2022	Student SEA deployed, two versions for upper grades (6-12 grade) and lower grades (1-5 grade), external evaluators share reports with school leaders

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[11] Aucejo, E. M., French, J. F., Ugalde Araya, M. P., Zafar, B. (2020). The impact of Covid-19 on student experiences and expectations: Evidence from a survey. National Bureau of Economic Research, Working Paper 27392. Retrieved: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7451187/

Date	Overview of Implementation Activities
March-April 2022	SEA deployed, two versions for upper grades (6-12 grade) and lower grades (1-5 grade), external evaluators share reports with school leaders.

Adult MMS survey deployed, external evaluators share reports with school leaders. |
May 2022	Student interviews at select schools based on experiences with SEA and MMS survey, overall experiences and impressions on engagement and school-based, selected engagement strategies
September-October 2022	Focus groups and interviews with select school leaders, teachers, and school staff based on experiences with SEA, MMS, and overall project experiences.
November 30, 2022	RISE Project Formally Concludes

Student Engagement Assessment (SEA)

While the importance of student engagement is well researched and even agreed upon, how best to measure or assess student engagement is less widely accepted. Engagement is defined by a student's active investment in a task or learning environment, yet this investment or mental effort is not readily observable. Engagement is an inner quality that students employ.

So, how can, or rather, **should** schools measure or assess student engagement that maintains the integrity of what engagement truly entails? This question was held at the center of Apex's efforts in the development of the SEA, though the question is not necessarily novel. Many small to very large, corporate companies and organizations have developed and offer a large suite of assessments that intended to contextualize student engagement and overall experiences in the learning environment.

Given the much smaller scale of IDLEA, Apex studied the assessment landscape and overall scientific literature on student engagement measures.[12,13,14] Assessments that explored engagement by domain—behavioral, cognitive, and emotional—were not readily available or discovered as part of Apex's early research. Thus, it was imperative to understand general engagement questions that also tied specifically to each engagement domain. As suggested in the research, the assessment produced a domain-specific engagement score that allowed for distinctions among types of engagement.[15]

In addition to the literature, Apex consulted often with project leadership and school-based leadership teams. Early in the planning process, it was stated that student engagement assessments cannot be punitive, for students and their teachers alike. While research on student engagement measures suggests ensuring measures

[12] Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. Review of the Research. 74(1), 59-109.

[13] Fred M. Newmann, Introduction to *Student Engagement and Achievement in American Secondary Schools*, ed. by F. M. Newmann (Teachers College Press, 1992)

[14] "Engagement and Disaffection in the Classroom," *Journal of Educational Psychology* 100 (2008): 765-81.

[15] It must be noted that scores that offer a conceptual distinction from other forms of engagement are not perfect. Distinctions are blurred because similar items are used to assess different types of engagement, meaning several questions on the SEA are used as indictors across one of more engagement domains.

distinguish a target or source of engagement, such as a subject area, specific classrooms, or even specific tasks or situations, doing so could unintentionally target or "call out" individuals. This limitation is further explored in the section Limitations and Future Learning Opportunities.

In general, the SEA was developed with the following considerations:
- Use of a continuum from less to more engagement as opposed to binary measures such as engaged or not engaged
- Estimated engagement based on indirect indicators across three engagement domains, such as participation in academic work, including attendance, completion of tasks, and time spent on work
- Estimated engagement based on student reported feelings of enthusiasm, interest, belonging, and intensity of concentration
- Wording questions and formatting the survey to be understandable to students and developmentally appropriate for different grade levels
- Ensuring the survey length was minimally burdensome for students and teachers

From its inception in Spring 2021, the SEA experienced several changes and adaptations based on feedback from school leaders and teachers as well as initial SEA findings. The first SEA was developed in two base versions for K-3rd grade students and 4-12th grade students. Both versions were also offered in Spanish. The K-3 version was reduced in number of questions and included wording more appropriate for K-3 students. The scale included images that also supported students in selecting their answer. The SEA was refined for SY22 to incorporate feedback from teachers and school administrators. The final SEA offers a lower grade (1-5) and upper grade (6-12) version to better match natural distinctions in grade level between elementary and middle school structures.

The final versions of the Student Engagement Assessment questions are detailed in Appendix A.

Mental Model Survey (MMS)

Research indicates a focus on student engagement is at the heart of a successful school culture and indicative of effective teaching approaches. While schools that focus on student engagement and commit to measuring student engagement are not necessarily novel in this approach, the IDLEA Project goes further to explore how schools might actually ***distinguish between a student's willingness to comply with school routines versus an actual investment in mastering and comprehending academic content and skills.***

The IDLEA Project attempts to make this distinction through a Mental Model Survey (MMS), with adaptations for adults and students based on unique needs. Mental models are a universal term that describes how we bound an idea or perceive the world around us. Mental models are an approximation of reality. Drs. Derek and Laura Cabrera, experts in systems theory and systems thinking with Cornell University, further describe the role of mental model as well caution how we evaluate mental models in the context of organizations. Our mental models can never fully capture the complexities of the world, and given our mental models are informed by our

unique experiences based on the environment in which we work, we often do not share mental models, individually or across organizations.[16]

With over a decade of experiences in schools and large school districts across the country, Apex often witnessed the implications when students, teachers, and administrators do not share mental models related to a multitude of educational initiatives. This includes divergent mental models regarding student engagement, including what it is, how it looks, and how to influence students' levels of engagement. In partnership with schools and IDLEA Project Leadership, Apex proposed the following questions:

- If engagement is an inner quality only students employ, how can adults in schools better understand students' reality?
    - Do students, teachers, and administrators share mental models on observable indicators of engagement? Meaning, do students demonstrate (show) their engagement in a manner that teachers perceive such demonstrations as engagement?
    - If engagement can only be understood in reference to specific activities and social contexts, how can students and adults share a mental model regarding these activities and contexts?
- What are the consequences to the IDLEA Project if adults and students do not share mental models on student engagement and how it is assessed for the project?
    - Are administrative and teacher decisions based on correct assumptions of student learning and engagement?

The MMS was developed based on potential answers (or in some cases, more questions) derived from the questions above. The questions also illuminated the need for the IDLEA Project overall to share a mental model about student engagement as well as the project intent. As described earlier, the IDLEA Project shared a mental model on student engagement across three domains, behavioral, emotional, and cognitive. Further, the project recognized school staff, including teachers, administrators and other staff members such as intervention specialists and counselors, are the "unit of change." In other words, the IDLEA Project provided direct supports to school staff in order to broaden their skills and understanding of student engagement so that students would be able to deepen their own engagement in their learning environments. This was the heart of the design for the MMS—to provide critical feedback to school staff in their continued understanding of their own students, reveal how their students invest in their learning (or want to), and expose opportunities for school staff to further their own learning on how to support diverse learners specifically.

Like the Student Engagement Assessment, the MMS was revised and refined based on feedback. The final version of the MMS also includes more contextual questions such as how long school staff has been in an education career, how long they have been in their current school, and perceived degree of personal participation in professional development offered through the IDLEA Project.

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[16] Cabrera, D. & Cabrera, L. (2015). Systems thinking made simple: New hope for solving wicked problems. Plectica Publishing.

IDLEA Project Selected Student Engagement Strategies

Based on Spring 2021 SEA and MMS results, IDLEA Cohort Schools worked closely with Project Leadership to select research-based student engagement strategies with particular success in furthering the engagement of diverse learners. Selected strategies include Cooperative Learning, Increasing the Cognitive Lift, and Universal Design for Learning. For each strategy, "strategy-specific" questions were included on the Student Engagement Assessment. Including such questions served as an alternative measure of implementation fidelity. In addition to administrators, teachers, and/or project consultants visiting classrooms to observe how student engagement strategies are being utilized, strategy-specific questions allowed for students to describe the resources and activities in their own learning environment.

This addition embodies the questions posed in the development of the MMS survey and intends to move adults and students alike toward shared mental models. Most educational initiatives measure fidelity of implementation using observation protocols conducted by external consultants or school staff self-reporting. While important data is collected using these methods, the data leaves out a critical perspective—students'. By asking strategy-specific questions on the SEA, students are provided the opportunity to report on the use of certain strategies, resources, and activities that they recognize in their learning environments.

This data is intended to be paired with data from observations or school staff self-reporting and might reveal critical gaps in implementation. For example, if school staff report high fidelity of implementation strategies, but students report not utilizing the resources or responding to particular strategies, how might that inform implementation moving forward? Often times, teachers rely on students' academic performance to determine the quality of the new strategy, and if data does not reveal any improvement, either the strategy or the teacher's implementation (or both) are called to question. Without student perspective on implementation, teachers and administrators risk assuming students recognize and participate in the very strategies they are both being assessed on, directly and indirectly. Such questions continue to situate adults in schools as the "unit of change" and exemplify the intent of the IDLEA Project to support school staff in furthering their skills to increase student engagement, particularly for diverse learners.

Intervention-specific questions for the SEA are detailed in Appendix A.

Cooperative Learning

Cooperative Learning is an educational approach that organizes classroom activities into cooperative, interdependent learning experiences for students so that they can benefit from one another's resources and skills. Cooperative learning experiences collectively further their academic goals. Cooperative Learning intends to increase student engagement by specifically attending to students emotional engagement in the classroom. By increasing opportunities for students to work collaboratively, they can benefit from positive social relationships among peers and might be more open to thinking creatively in the group dynamic. Individual learning, considered at times to be competitive in nature, might actually constrain students' ability to think open-mindedly as well as take intellectual risks given their fear of being "wrong." This is particularly relevant for diverse learners who might experience even greater discomfort and hesitate to engage in their learning

environments. In a group among peers, diverse learners are more likely to try out new ideas as well as relate new ideas to their experiences.

Cooperative Learning traces its origins to social interdependence theory, and includes significant educational theorists such as John Dewey. David and Roger Johnson are considered the latest researchers to give further definition to cooperative learning theory, and, based on their research, cooperative learning can promote better communication, increase mutual student support, and higher-order social and cognitive skills. Johnson and Johnson also published the five elements that allow successful, small-group learning:

1. Positive interdependence: Students have clearly defined roles and tasks and feel responsible for their own learning as well as the group's
2. Face-to-face interaction: Students explain to one another the nature of their learning as well as assist one another with understanding and completion of tasks
3. Individual and group accountability: Students are responsible for meeting their goal as well as the goal of the group, which includes mastery of content being studied
4. Social skills: Students are directly instructed on interpersonal, social, and collaborative skills needed to work in small groups
5. Group processing: Students reflect on actions that were helpful or harmful to their learning endeavors, analyzing their own and the group's ability to work together

The role of the teacher shifts in their efforts to structure more opportunities for students to work collectively. No longer centrally responsible as the source of information, the teacher acts as a facilitator of student learning, with an equal focus on how to support students social development in order to make small groups more successful. Common activities indicative of cooperative learning include "think, pair, share," jigsaw, and inside-outside learning circles.

Increasing the Cognitive Lift

Increasing the Cognitive Lift is an approach in which educators offer planned activities and pose questions that lead to higher order thinking. Student activities that are grounded in tenets of Increasing the Cognitive Lift also offer opportunities for students to demonstrate their knowledge through discourse and task completion that require higher depths of knowledge.

Increasing the Cognitive Lift is strongly references and utilizes Bloom's Taxonomy as well as Webb's Depths of Knowledge. Bloom's Taxonomy is a framework created by Benjamin Bloom (1965) that consists of six major categories: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. Knowledge is considered the necessary precondition for putting the skills, the categories after knowledge, into practice.

Webb's Depths of Knowledge (1997) offers a framework for identifying levels of cognitive complexity of information students are expected to know as well as how they should be able to transfer this knowledge to different contexts. Four content areas describe how depth of knowledge can be addressed:

1. Recall and reproduce data, definitions, details, facts, information, and procedures (knowledge acquisition)

2. Use academic concepts and cognitive skills to answer questions, address problems, accomplish tasks, and analyze texts and topics (knowledge application)
3. Think strategically and reasonably about how and why concepts, ideas, operations, and procedures can be used to attain and explain answers, conclusions, decisions, outcomes, reasons, and results (knowledge analysis)
4. Think extensively about what else can be done, how else learning can be used, and hose could the student personally use what they have learned in different academic and real-world contexts (knowledge augmentation)

Where Bloom's Taxonomy details the type of thinking or kind of knowledge students are expected to demonstrate, Webb's Depths of Knowledge establish the context in which students share the depth and extent of their learning. Used together, educators successfully employ Increasing the Cognitive Lift Strategy. The strategy's name alludes to how it might support student engagement, with a clearer focus on cognitive engagement. Educators who employ strategies aimed to further students' cognitive engagement often remind their students that struggle is productive, and rather than teachers immediately offering answers to student questions, they encourage students to go deeper into their own inquiry and investigation.

Further, as part of this approach, educators take time to learn what sparks student curiosities. When learning is meaningful to students, they are more likely to work harder and commit more mental effort toward the learning or task at hand. This is particularly critical for diverse learners as well as students with different racial or ethnic backgrounds.

Universal Design for Learning (UDL)

Defined by the Center for Applied Special Technology (CAST), Universal Design for Learning is grounded on a simple yet powerful premise—curriculum, from the outset, should be designed to accommodate all learners. This is achieved through three principles (underlined) that support educators in creating curriculum that provides multiple means of:
1. Engagement by providing options for recruiting interest, sustaining effort and persistence, and self-regulation;
2. Representation by providing options for perception, language and symbols, and comprehension;
3. Action and expression by providing options for physical action, expression and communication, and executive functions[17]

The ultimate goal of UDL is to "develop 'expert learners' who are, each in their own way, resourceful and knowledgeable, strategic and goal-directed, purposeful and motivated."[18] Educators who practice UDL structure curriculum in four parts—instructional goals, methods, materials, and assessments. UDL is specifically supportive of increasing student engagement for diverse learners by increasing access to learning through the reduction of physical, cognitive, intellectual, and organizational barriers to learning.

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[17] CAST (2018). Universal Design for Learning Guidelines version 2.2. Retrieved from http://udlguidelines.cast.org
[18] Ibid.

While most schools selected one of the three strategies described above, one cohort school opted to select a literacy program called LETRS (Language Essentials for Teachers of Reading and Spelling). LETRS intends to provide educators and administrators with deeper knowledge in literacy and reports to teach skills needed to master the fundamentals of reading instruction—phonological awareness, phonics, fluency, vocabulary, comprehension, writing, and language. Because LETRS does not explicitly focus on student engagement as described in the IDLEA Project, strategy-specific questions were not included on the SEA for the cohort school. However, the SEA was still administered, and the data are included in this report.

IDLEA Cohort Schools

There were 12 public charter schools from across Colorado that took part in the *entirety* of the IDLEA Project. Six schools are located in the Denver area, and two schools are located in Colorado Springs. Additional schools are located in Steamboat Springs, Carbondale, Pagosa Springs, and Durango. For a list of cohort schools, see Appendix I.

IDLEA cohort schools span a wide range of school models with different educational philosophies. The diversity of educational models offers a rich backdrop for IDLEA Project implementation as well as requires schools to interpret and employ selected student engagement strategies that are contextualized to their school setting and student population.

Four schools offer a college preparatory model, meaning they offer a curriculum that supports students in developing the skills necessary to succeed in college. College preparatory programs offer traditional high school courses while also offering coursework that establishes a solid foundation for students' future college careers. College preparatory courses often include time management, good study habits, organization, and self-discipline/motivation. Two of the cohort schools are unique in their college preparatory design in that they are also a single gender school. Single gender schools positively report the elimination of gender stereotypes, and classroom environments can be specifically adapted based on single gender needs. Further, gender distractions in the classroom are prevented.

One of the four college preparatory schools also offers a project-based model as does one other cohort school. Project-based learning models offer teaching methods in which "students gain knowledge and skills by working for an extended period of time to investigate and respond to an authentic, engaging, and complex question, problem, or challenge."[19] Project-based learning engages students in real-world problems, and they demonstrate their knowledge by creating a public product or presentation for real audiences. Two schools offer expeditionary learning models, a model very similar to project-based learning. Expeditionary learning includes elements of self-discovery and ownership of individual learning. Like project-based learning, expeditionary learning is based on student interest and connections to the real world. Expeditionary learning typically has a focus on nature with physical activity and real-world exploration.

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[19] Buck Institute for Education, PBL Works, retrieved: https://www.pblworks.org/what-is-pbl

Two schools offer a classical school model in which students are expected to master a variety of subjects, often including history, mathematics, science, literature, Latin and English, as well as gain familiarity with at least one other language and fine arts. Classic schools emphasize the importance of dialogue and reasoning, and often utilize a curriculum that is very sequenced, based on knowledge and experiences from previous grades. This specificity helps to ensure consistency within grade levels and that students are building a knowledge base that is shared and can assist with future learning.

Three cohort schools offer school models unlike any other cohort school. One school offers a Montessori education, which is distinct for its five core components—trained Montessori teachers who have the skills and expertise to implement high-fidelity Montessori programs; Multi-age classrooms with three year age spans; Use of Montessori materials that provide a hands-on approach to learning; Child-directed work in which students self-select work, leading to intrinsic motivation and sustained attention; and uninterrupted work periods that enables students to work at their own pace and without interruption.[20]

Another schools offers a language immersion model in which students learn core content in English and their second language. Students spend their school day immersed in a second language as they employ their natural ability to learn the new language. Finally, one school employs an alternative education model, which is designed to educate students who have not been successful in regular schools for a variety reasons—behavior, disciplinary, or safety concerns. Alternative schools tend to be more flexible in their scheduling and offer specialized courses such as social and emotional learning support.

IDLEA Project Student Demographics

Given the geographic and educational model diversity among IDLEA cohort schools, student demographics are also quite diverse. There were 3,270 students who participated in the SEA at least once; some participated multiple times. Table 2 below describes students who directly participated in the IDLEA Project. The data will not always total 100% due to missing information, ability to select multiple categories, or rounding.

Table 2: Student Demographics

Category	Percent	Number
Gender		
Male	38.4%	1256
Female	50.2%	1640
Race/Ethnicity		
American Indian or Alaska Native	0.9%	28
Asian	2.0%	65
Black/African American	4.2%	138
Hispanic	29.3%	957
Native Hawaiian or Asian Pacific Islander	0.5%	15

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[20] American Montessori Society, 5 Core Components of Montessori Education, Retrieved: https://amshq.org/About-Montessori/What-Is-Montessori/Core-Components-of-Montessori

(continued) Table 2: Student Demographics

Category	Percent	Number
White (non-Hispanic)	48.4%	1584
Diverse Learner Category		
English Language Learners	18.9%	617
Free and Reduced-Price Lunch*	25.6%	456
504 or IEP Designation	12.0%	393
Gifted or Talented Designation	6.1%	200

*Data on FRL status was only available for 1,784 participants

IDLEA Project School Personnel Demographics

While demographic data was not collected on project administrators, teachers, or school staff, additional questions on the final MMS deployment provided additional information on adults that participated in IDLEA. A total of 366 classroom teachers, school administrators, and support staff completed the MMS in SY21, and 189 completed it in SY22. Table 3 details various characteristics across IDLEA school personnel from SY22.

Table 3: School Personnel Profiles from SY22 MMS Participants

Category	Percent	Number
Primary Role		
School Administrator	11.1%	21
Classroom Teacher	67.2%	127
Classroom Support Staff	14.3%	27
Other Student Support Staff	7.4%	14
Years in Education		
0-3 years	18.0%	34
4-7 years	23.3%	44
8-14 years	33.9%	64
15 or more years	24.9%	47
Years in Current Role		
0-3 years	59.8%	113
4-7 years	27.5%	52
8-14 years	10.6%	20
15 or more years	1.6%	3

IDLEA Project Evaluation Methods

The Apex Blend

Apex intentionally focuses on evaluation methods that support high learning needs, emerging ways of understanding complex problems, and participatory ways to include perspectives among participants in the evaluation. Contracted early in the IDLEA Project planning process, Apex helped inform project implementation and developed survey tools (SEA and MMS) that embodied this commitment to learning and emergence.

Considering IDLEA Project evaluation needs, Apex relies on the tenets of systems learning and developed an evaluation plan that helped IDLEA Project participants to use credible evidence to build, share, test, and evolve mental models. Systems learning is rooted in systems thinking. Simply stated, systems thinking is the emergent property of four, universal patterns: distinction-making (D), part-whole systems structure (S), cause-effect relationships (R), and perspectives (P).[21] In the DSRP model, particular weight is given to the role of perspective as it influences every other pattern of thinking. For IDLEA, Apex gave particular attention as to how students and school personnel have the opportunity to offer their perspectives and shape, even scrutinize, the body of evidence as it relates to this project. Perspective is at the core of the Mental Model Survey.

Data Collection and Analysis

The SEA and MMS were distributed to 13 schools across the state of Colorado, with schools representing urban, rural, and suburban communities. See Table 4 for the administration timeline.

Table 4: Survey Administration Timeline

Timeframe	Instruments Administered
Spring 2021	- Adult MMS - Hybrid Student MMS/SEA
Fall 2021	- Student SEA, two versions included upper grades (6-12 grade) and lower grades (1-5 grade)
Winter 2021	- Student SEA, two versions included upper grades (6-12 grade) and lower grades (1-5 grade)
Spring 2022	- Adult MMS - Student SEA, two versions included upper grades (6-12 grade) and lower grades (1-5 grade)

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[21] Cabrera D, Cabrera L. Systems Thinking Made Simple: New Hope for Solving Wicked Problems. Plectica Publishing; 2015.

Student Engagement Assessment Data Collection

The online survey tool with predominantly Likert scale-type items was distributed to schools through a web-based survey platform. All students in grades 6 through 12 (upper grades) were asked to participate during each SEA administration. Roughly half of all upper grade students participated in each SEA. Grades 1 through 5 were considered lower grades and were given a shortened SEA version with simplified question wording. Students in grades 4 and 5 were able to complete the survey independently. However, students in grades 1 through 3 needed additional support from an adult. This extra time for teachers and school staff to administer the SEA to students in grades 1 through 3 was found to be too burdensome after the 2022-Fall administration. Subsequently, Apex used a stratified random sampling process in the three schools with sufficiently large student populations to generate lists of students to complete the SEA in the 2022-Winter and 2022-Spring administrations. The completion rates for sampled students on the SEAs were above 90% at each school with representative percentages of students from each diverse learner category.

In addition to SEA data, student demographic data were collected from schools. Relevant demographic characteristics were submitted on students' gender, English learner (ELL) status, qualification for free or reduced-price lunch (FRL), special education status (IEP/504), and gifted and talented status (GT). Data were collected by school administrators through individual schools' student information systems (SIS) and submitted to the research team at the start of the school year by 12 of the 13 cohort schools, with the final school submitting SIS data at the end of the year. FRL status was not available for some cohort schools because that information is not made available by their school districts.

After each SEA administration, incomplete, duplicate, and test responses were removed from the dataset. Data submitted by schools from their student information systems were then matched to individual student responses using the fuzzy matching function in Excel for each student's full name. Matches were verified and refined by determining whether the student's school and date of birth also matched. Results of the fuzzy matching process yielded greater than 70% of survey responses matched to a verified student profile in the SIS data for every school, with the average for both the lower and upper grades SEAs being above 90% for each administration.

Analyses were completed by identifying desired responses - for most survey items "Most of the time" or "All of the time", which were aggregated and analyzed as 'most of the time or more often' - and calculating the percent of students who answered with a desired response across multiple characteristics including each of the four diverse learner groups, school, grade level, and gender with cross tabulations calculated for the three domains of engagement. Trends were examined over the four SEA administrations.

Mental Model Survey Data Collection

The Mental Model Survey (MMS) was administered twice to a variety of school staff – classroom educators, school administrators, classroom support staff, and other school support personnel. The first administration was in Spring 2021 (SY21). All 13 cohort schools participated in SY21, and 12 schools participated in the Spring 2022 (SY22) administration. The SY21 MMS results offered a baseline set of information about educators' perceptions

and understandings of student engagement. The MMS was administered again at the end of the project in Spring SY22. The SY21 and SY22 surveys were slightly different. There were questions about virtual learning in SY21 and questions specific to their participation in the IDLEA Project in SY22. A total of 366 adults participated in the MMS.

After all responses were collected, the datasets were cleaned and appended. Analyses were conducted to examine changes in teachers' attitudes and beliefs about student engagement and their perceptions of their efficacy in engaging students from diverse learner groups.

IDLEA Project Overall Findings

Student Engagement Assessment Findings

The first set of analysis examined the change in student engagement from 2021 Spring SEA administration to 2022 Spring SEA administration for students overall as well as between diverse learner groups. Students overall, across engagement domains, reported higher levels of engagement compared to the beginning of their school year. While the students' overall engagement score indicates as increase in their investment and effort in their learning environments, domain specific engagement scores provide more detail. Trends in engagement changed over the course of the full school year, and for some domains, engagement declined (Table 5). Overall, students reported the **lowest levels of engagement in the cognitive domain** in every administration in both the upper and lower grades and across diverse learner categories. Students reported the **highest levels of engagement in the emotional domain** in every administration in both the upper and lower grades and across diverse learner categories.

Table 5: Change in Average Overall Student Engagement by Domain

Engagement Domain	Spring 2021	Spring 2022	% Change
Behavioral	51.0%	59.5%	+8.5%
Cognitive	42.9%	55.8%	+12.9%
Emotional	57.8%	70.6%	+12.8%

As noted earlier in this report, the IDLEA Project was founded on a simple aim—to increase engagement among diverse learners in order to address the challenges of the COVID-19 pandemic and help close the achievement gap between them and their peers. **Evaluation findings generally reveal the IDLEA Project was successful in this effort across 3 of the 4 diverse learner categories in each domain of engagement.** The greatest gains were experienced by students qualifying for free or reduced-price lunch and students with an IEP or 504 Plan. On average, the cognitive domain saw the largest increases (19.3%), followed by the emotional domain (18.0%). Students identified as gifted and talented experienced slight decreases in their reported levels of engagement across every domain. Table 6 illustrates the percentage of change for each diverse learner group.

Table 6: Change in Diverse Learners Reporting Engagement Most of the Time or More Often Between 2021 and 2022 SEA Administrations

Domain	ELL	FRL	IEP/504	GT
Behavioral	8.9%	17.1%	20.44%	-5.0%
Cognitive	11.4%	25.7%	20.8%	-3.6%
Emotional	11.1%	29.5%	13.4%	-2.3%

In addition, the engagement of students in each diverse learner category were compared to students who were not in the respective category. The gaps between the in-group and out-of-group students were analyzed. There were significant gaps between students in SY21. Except for students identified as Gifted and Talented, the gap

between the in- and out-of-group students decreased from SY21 to SY22 Table 7 describes the decrease (-change) or increase (+ change) in the gap between students in and out of each group.

Table 7: Change in the gap between in-group students and out-of-group students from SY21 to SY22 in each domain of engagement

Domain	ELL	FRL	IEP/504	GT
Behavioral	-6.7%	-8.8%	-23.9%	+3.6%
Cognitive	-6.8%	-20.6%	-17.4%	+6.6%
Emotional	-12.3%	-20.5%	-13.7%	+1.6%

Examining changes in student engagement across domains gives further context to the nature of student engagement, yet the analysis went further to explore changes in student response by individual SEA questions across domains. Looking closely at student response by question lends specificity to how students might have shifted in their investment and mental effort toward specific tasks as well as how they might have changed in their outward (observable) demonstration of engagement.

Behavioral Engagement

Two student actions that traditionally (and observably) indicate engagement include raising one's hand to offer an answer or ask a question as well as sitting quietly. For the lower grades, 64.5 % of students reported raising their hands to show they are paying attention most of the time or more often in Fall 2021, and interestingly, this decreased by 6.1% by Spring 2022. Upper grades experienced the same decline in percentage of students raising their hands to demonstrate they are paying attention, with 52.4% of students reporting they engage in this behavior most of the time or more often in Fall 2021, declining to 46% in Spring 2022. Regardless of a change in this engagement behavior throughout the school year, it is worthwhile to note around 60% of students in the lower grades engage in raising their hand most of the time or more often, and only 50% of students in upper grades as well. This is a notable difference between lower and upper grades.

Students who report sitting quietly most of the time or more often throughout the 2021-2022 reveal an interesting trend as well. While the change between SEA administrations is less noticeable, (-1.5% for both lower and upper grades), about 65% of students in lower grades and 69% of students in upper grades report sitting quietly to show they are paying attention most of the time or more often. For traditional classrooms that might value "quiet bodies," these results warrant further exploration.

Cognitive Engagement

While several SEA questions indicate engagement in more than one domain, cognitive engagement is largely focused on students' intellectual investment in their learning, including their persistence in difficult tasks and interest in classroom content. In an attempt to determine the degree to which students exert mental effort in class, the SEA asked students how often they feel challenged by their course work. For the lower grades, students report an increase in their feeling challenged by classwork between Fall 2021 and Spring 2022. 42.7% of students reported feeling challenged most of the time or more often in Fall, increasing over 15% to 58.1% by

Spring 2022. This change is less dramatic for students in upper grades, and it is worth calling attention to the much lower response among students in upper grades. In Fall 2021, only 31% of students in upper grades report being challenged by classroom most of the time or more often. This increased 2% by Spring 2022. These results demand further exploration given 2/3 of students in upper grades report being challenged by classwork only some of the time, not much, or none of the time.

Students who find classroom activities interesting are more likely to commit their cognitive resources toward completion of tasks or engage in general classroom dynamics. In lower grades, students reported a decrease in interest of classroom activities most of the time or more often, from 62.8% in Fall 2021 and 53.8% in Spring 2022, a 9% decrease. Upper grades reveal a similar phenomenon, with 51.0% of students in Fall 2021 reporting classroom activities being interesting most of the time or more often, decreasing to 41.9% in Spring 2022. While reported earlier, it is worth mentioning again that students reported the **lowest levels of engagement in the cognitive domain** in every administration in both the upper and lower grades and across diverse learner categories. This is further explored in the Discussions section.

Emotional Engagement

Indicators of emotional engagement related to students' general affect toward school, schoolwork, and people at school. Perhaps one of the most significant questions offered on the SEA explored how safe students felt at their schools. Both lower and upper grades reported high responses to the questions, "I feel safe at school," with 70.3% of Fall 2021 students in lower grades report feeling safe most of the time or more often. This increased 2.3% by Spring 2022. Upper grades report a slight decline in feelings of safety, though overall maintain positive Reponses. In Fall 2021, 79.5% of students in upper grades report feeling safe most of the time at school, decreasing just slightly to 75.1% in Spring 2022.

Considering how students interact with peers, the SEA asked students to indicate how often they get along with their classmates. For lower grades, 66.3% of students indicate getting along with classmates most of the time or more often, and in Spring 2022, 58.3% of students report getting along with classmates most of the time or more often, an 8% decrease. Upper grades experienced a similar decrease, but report getting along with classmates even more than students in lower grades. In Fall 2021, 79.2% of students in upper grades reported getting along with classmates most of the time or more often, decreasing to 77.2% in Spring 2022.

In an attempt to discern how students perceive of themselves a learner, the SEA asked students to indicate how often they *believe* they are a good student, and how often then *want* to be a good student. These questions aimed to reveal how students consider their current standing as a student compared to their desire or yearning to maintain or perhaps improve their standing in the future. Both questions, across grade levels, indicate overall positive response, with little change in response from Fall 2021 to Spring 2022. Most interestingly, however, is the difference in response between questions. While about 7.5/10 students report believing they are a good student, about 9/10 students report *wanting* to be a good student. Table 8 details student responses.

Table 8: Difference in Emotional Engagement Questions on Being a Good Student

Questions	Fall SY21	Spring SY22	Change
I believe I am a good student.			
Lower Grades	78.3%	77.1%	-1.2%
Upper Grades	74.5%	74.1%	-0.4%
I want to be a good student.			
Lower Grades	92.4%	91.6%	-0.8%
Upper Grades	90.3%	89.3%	-1.0%

Mental Model Survey Findings

The second set of analysis examined the change in mental models from 2021 Spring MMS administration to 2022 Spring MMS administration. All school staff – classroom teachers, school administrators, and support staff – thought student engagement declined from Spring SY21 to Spring SY22 across all learner groups. The reason for the shift is unclear but may be due to the lingering impacts of COVID-19, the shift from some virtual instruction at the end of SY21 to all in-person in Spring SY22, or possibly to changes in teachers' perceptions of student engagement. This is further explored in the Discussion section.

Classroom teachers and school administrators perceived student engagement differently in both SY21 and SY22 (See Appendix H, Table 1). **In SY21, teachers' perceptions of diverse learner groups' engagement were higher for every group than administrators' perceptions of their engagement.** However, in SY22 teachers felt that the engagement of English Language Learners and students qualifying for Free or Reduced-Price lunch was lower than administrators felt it was for each group. Overall though, in both MMS administrations, there was roughly 4% difference between the percent of teachers and the percent of administrators who felt students were engaged some of the time or more.

Based on student engagement research across behavioral, cognitive, and emotional domains, the MMS asked classroom teachers to what degree they felt a variety of different in-classroom factors influenced students' levels of engagement (See Appendix H, Table 3). **From SY21 to SY22, the percent of teachers who indicated each factor influenced students' engagement "somewhat" or "a lot" increased for all factors.** The largest increases were for "Teachers give feedback on student work" (88% in SY21 to 97% in SY22), "Projects or assignments are based on student input" (78% in SY21 to 85% in SY22), and "Curriculum that is reflective of students and who they are" (74% in SY21 to 80% in SY22). These findings may indicate that teachers' ideas about student engagement and how it can be influenced changed between the first and second MMS administrations and will be explored later in this report.

To gauge teachers' sense of self-efficacy, they were asked to indicate the extent to which they agreed that they had the skills needed to engage students from different diverse learner groups (See Appendix H, Table 5). **For each group, the percent of teachers who agreed or strongly agreed that they had the necessary skills increased: for students identified as gifted and talented the percent increased** from 72% in SY21 to 78% in SY22 (+15.7%); for students with an IEP or 504 plan the percent increased from 77% in SY21 to 90% in SY22 (+12.9%); for English Language Learners the percent increased from 70% in SY21 to 79% in SY22 (+8.4%); for

students who qualify for Free or Reduced-Price lunch the percent increased from 73% in SY21 to 78% in SY22 (+5.4%).

All MMS respondents were asked about their schools' focus on student engagement in SY22 and the use of the intervention strategies at their schools. Nearly half of respondents (49%) said that student engagement was frequently at topic at staff meetings in SY22, and 39% said it was occasionally a topic. Schools that had the strongest agreement that student engagement was a major focus during the school year had implemented Cooperative Learning (93% agreed) and Universal Design for Learning (84%) (See Appendix H, Table 6). Respondents from those two strategies also had the greatest degree of familiarity with their chosen intervention – 93% were somewhat or very familiar with Cooperative Learning and 61% were somewhat or very familiar with Universal Design for Learning. The LETRS intervention had the least familiarity with their intervention strategy at just 29% of teachers and school staff indicating that they were somewhat or very familiar with it.

Teachers, administrators, and school staff were also asked how effective they felt their school's intervention was in increasing student engagement for diverse learners. **Cooperative Learning was seen as the most effective intervention for every group** (See Appendix H, Table 9). Increasing the Cognitive Lift and Universal Design for Learning were seen to have similar effectiveness for diverse learner groups and students overall. LETRS was seen as the least effective for increasing student engagement among diverse learners.

The MMS asked teachers to describe how, compared to previous years, participation in this project changed their mental model and understanding of student engagement. The open-ended responses were coded for themes and analyzed. Nearly half of teachers (45%) said the project had changed their perspective on student engagement, and 7% said the project had not changed their perspective at all. Roughly a quarter of respondents (23%) indicated that it was either their first year of teaching or they did not have enough experience with the project to say whether it had an impact on their mental model of student engagement. In addition, 24% of teachers said that participating in the project helped them develop tools or skills to increase their students' engagement. And 15% said that their participation gave them better insight into their students' experiences of and perspectives of engagement.

State Academic Data Findings

Ideally, increases in student engagement will ultimately improve other student outcomes such as persistence, enjoyment of their schoolwork, and academic achievement. Although these broader impacts from changes student engagement take time to appear, the evaluation team conducted a preliminary analysis of the how cohort schools performed on the Colorado state academic assessments. The analysis examined the percent of students meeting or exceeding expectations in SY21 and SY22 for schools in the project cohort compared to schools in the rest of the state on the standardized assessments.

Data Available and Included

For grades 3 through 8, the state administers the Colorado Measures of Academic Success (CMAS) in several subjects. This analysis examined English Language Arts and Math results. The English Language Arts assessment

has a Spanish alternative version that was also included in the analysis. For grades 9 and 10, academic data comes from the PSAT, and for grade 11, the SAT. Because of the COVID-19 pandemic, there were no state assessment results for SY20. In SY21, only certain grades were required to take CMAS, but in SY22 state testing resumed full administration in all subjects and grades. Table 9 describes the state data available and included in the analysis.

There are significant limitations this analysis including limited state data due to privacy protections and high rates of student opt-out, which is prevalent in many Colorado school districts. There was not enough state data for the cohort schools to conduct any analysis for students with an IEP or 504 Plan. In addition, cohort schools were not able to provide student demographic data for some diverse learner groups.

Table 9: CO state academic data available and included in analysis

English Language Arts (or equivalent)			
Grade	SY20	SY21	SY22
3rd	No	Yes	Yes
4th	No	No	Yes
5th	No	Yes	Yes
6th	No	No	Yes
7th	No	Yes	Yes
8th	No	No	Yes
9th	No	Yes	Yes
10th	No	Yes	Yes
11th	No	Yes	Yes
Mathematics (or equivalent)			
Grade	SY20	SY21	SY22
3rd	No	No	Yes
4th	No	Yes	Yes
5th	No	No	Yes
6th	No	Yes	Yes
7th	No	No	Yes
8th	No	Yes	Yes
9th	No	Yes	Yes
10th	No	Yes	Yes
11th	No	Yes	Yes

State Academic Comparisons Results

Overall, there were very few significant differences between the cohort school and non-cohort school outcomes. Changes from SY21 to SY22 for both cohort and non-cohort schools are detailed in Appendix G. It is critical to note that understanding the impact of increased student engagement on academic achievement is important given the desire for prolonged support of targeted engagement efforts, yet, it is not without caution.

Standardized test often assess memory or lower-level cognitive skills, with limited opportunities for students to demonstrate deep understanding of materials presented to them. Thus, in many ways, understanding student engagement in the context of standardized assessments might actually narrow the multitude of ways students dynamically engagement, particularly in emotional and cognitive domains.

Discussion

The goal of the IDLEA Project was to increase engagement among diverse learners in order to address the challenges of the COVID-19 pandemic and help close the achievement gap between them and their peers. Evaluation findings reveal promising results considering most diverse learners. English Language Learners, students who qualify for free and reduced-price lunch (FRL), and students identified with a 504 or IEP all reported significant increases in their engagement measures across domains and closed the "engagement gap" between them and their peers without a diverse learner designation by the end of the between Spring 2021 and Spring 2022. FRL and IEP/504 students closed the engagement gap most significantly across all three domains. FRL students closed the emotional engagement gap between them and their non-FRL peers by almost 30%. Considering the FRL category is widely viewed as a proxy indicator for both poverty and trauma, this result is particularly encouraging. Students in low socioeconomic status groups are more likely to experience a decline in engagement throughout their schooling, which could lead to a variety of adolescent pitfalls.[22] Increasing FRL students' emotional engagement, inclusive of their overall sense of belonging and affirmation for peers, teachers, and the school in general, might counter or help mitigate well-documented declines in engagement.

Diverse learners were the focus for the IDLEA Project, yet results indicate students overall increased in their engagement across domains throughout the 2021-2022 school year. IDLEA Cohort students report the following changes from Spring 2021 Spring 2022:
- 8.5% increase in behavioral engagement
- 12.9% increase in cognitive engagement
- 12.8% increase in emotional engagement

It is critical to acknowledge IDLEA cohort schools supported student engagement in a multitude of ways, including efforts *beyond* the IDLEA Project. However, results **might** allude to successful strategies and efforts as a direct result of the project throughout the 2021-2022 school year. Further, it is critical to situate these results in the very different school contexts between Spring 2021 and Spring 2022. Still reeling from the effects of COVID-19, many schools were operating virtually or in a hybrid learning environment. Increases in engagement, across domains, could generally be a result of a change in learning modality since the evaluation cannot isolate for IDLEA-specific interventions. As students returned to school in person, it is reasonable to assume they naturally benefited from an increase in belonging, more challenging classwork, and were able to demonstrate behavioral engagement in more familiar ways.

Overall increases in students' engagement, especially for diverse learners, is promising regardless of not being able to isolate for the effects of IDLEA interventions. Once student engagement is established, the potential for evolution in intensity and duration *continues*. Student engagement builds on itself, therefore, it is reasonable to assume that any improvement in student engagement is likely to lead to future outcomes of interest, such as developing habits of mind and heart that lead to continuous learning and personal development.

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[22] Skinner, E. A., Zimmer-Gembeck, M. J., Connell, J. P. (1998). Individual differences and the development of perceived control. Monographs of the society for research in child development, 254 (63).

Declines in student response by question or domain warrant further investigation into school context throughout the school year as well. For example, students reporting a decrease in general interest toward classwork or feeling challenged in their classroom activities could be influenced by spring the Colorado Measures of Academic Success (CMAS) assessment requirements or needs, where schools shift from more familiar or traditional curriculum offerings to designating explicit time and effort CMAS to boost student confidence and success. By the end of the school year, students might naturally disengage from being "burnt out" from their investment thus far. With the school year nearing an end, is a well-documented phenomenon that students might put forth less effort toward their learning. Overall, the timing during which SEAs are deployed as well as other activities or efforts that coincide with the SEA might have an unanticipated effect on student response.

The difference in response between students whole *believe* they are a good student and *want to be* a good student is a notable result. Such questions align with student engagement literature in that it reveals students' current assessment of who they are as a student as well as a future identity. It also offers students an opportunity to more honestly assess their current belief as a student, recognizing they might not currently demonstrate their "goodness" most of the time or more often, *but they want to.* SEA findings specific to students' desire to be a good student also offer a more generous view of students. With 9/10 students reporting wanting to be a good student, administrators and classroom teachers alike might use this finding to view indicators of student *dis*engagement differently. For example, this finding might contrast a teacher's observation of a student's undesirable behavior and recast negative assumptions toward a more affirming view. The teacher might consider, "My student does not seem to want to engagement, but I know they want to be a good student. How might I change my pedagogical decision-making so that my student can demonstrate this?" Students' beliefs and orientations toward school are critical, and educators must take them seriously. This is perhaps the greatest function of the Student Engagement Assessments.

This type of reframing is particularly critical for students who come from different racial/ethnic or cultural backgrounds and speaks to some of the Mental Model Survey results as well. The MMS asked teachers to gauge their sense of self-efficacy related to the extent to which they agreed that they had the skills needed to engage students from different diverse learner groups. For each group, the percent of teachers who agreed or strongly agreed that they had the necessary skills increased. This result speaks to the value of the IDLEA Project to classroom teachers, specifically, and might also ensure the results from this project endure indefinitely. As teachers build upon their skills to support diverse learners, students outside of diverse learner categories benefit as well, and as teachers continue to hone their skills within their profession, it is likely these newly learned skills will continue to benefit students across Colorado.

Differences in perceived student engagement between classroom teachers and school administrators must be investigated as well. In both MMS administrations, there was roughly 4% difference between the percent of teachers and the percent of administrators who felt students were engaged some of the time or more. In many ways, this comparison distorts the potential of the mental model survey to illuminate stark difference among administrator and classroom teacher mental models. While results are presented in aggregate for this evaluation report, it is essential to note MMS results are most useful at a school level. Differences in how

administrators and classroom teachers perceive engagement as well as how it is assessed are very much based on their specific school model, educational philosophy, and curricular offerings. Data that reveal such differences and opportunities for discussion on how to share mental models are lost when presented in aggregate.

Limitations and Future Learning Opportunities

Between the MMS and SEA, IDLEA results offer a rich understanding or student engagement across cohort schools. Yet, it is important to recognize the limitations of this evaluation and offer additional context in which to interpret these results. Research on student engagement helps situate some of these limitation by reminding engagement is always impacted by the following factors, most of them well outside the bounds of this evaluation, including:[23]

- Students' personal and social backgrounds;
- The district and community context, whose norms and policies affect many aspects of life in school;
- School culture, reflected in beliefs and values of staff and students;
- School organization (size, structure, division of labor);
- Curriculum;
- Teachers' background and competence; and
- Teacher-student interaction, in and out of class.

Some of these factors were explored as part of the IDLEA project, but a deeper examination in the interaction among these factors needs to be explored further.

Domain-specific measures help determine to what extent engagement represents a general tendency in a domain, and their inclusion in the IDLEA Project is well-informed by research. However, these results do not discern to what extent engagement might be *content specific*. IDLEA results are limited in that they are not attached to specific tasks, situations, or content areas. Thus, results speak to engagement as a general tendency, combining questions about classrooms, the school in general, academics, and peer/adult relationships. Future explorations of student engagement should consider to what extent engagement is a function of individual differences or contextual factors.

Finally, it is critical to note that while the IDLEA Project experienced positive results, there is no comparison group for which results can be understood. Without a comparison group or the ability to isolate the effects of IDLEA-specific interventions, this evaluation cannot state for certain project results are rare or uncommon.

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[23] Fred M. Newmann, Introduction to *Student Engagement and Achievement in American Secondary Schools*, ed. by F. M. Newmann (Teachers College Press, 1992)

Appendix A: Final SEA Questions by Domain

Behavioral

- I raise my hand to show I'm paying attention.
- I nod my head to show I'm paying attention.
- I smile or laugh at school.
- I turn in my homework or assignments.
- I make eye contact with my teacher.
- I sit quietly.
- Whole group classroom discussions are interesting.
- I have the chance to take breaks.

Cognitive

- I feel challenged by my classwork.
- I can make choices about my work and learning.
- I get to ask questions.
- I share about my learning and thinking.
- Classroom activities are interesting.
- I complete the activities in class.
- I talk with my classmates.
- I ask questions in class.

Emotional

- I feel comfortable sharing my thoughts in class.
- I believe I am a good student.
- I want to be a good student.
- I enjoy being in my classroom.
- My teacher is happy to have me in their classroom.
- I feel accepted for who I am and where I come from.
- I get along with my classmates.
- I feel safe at school.
- I get to work with my classmates.
- Adults at my school help me or care about how I'm doing.
- I can be myself at school.

Cooperative Learning

- I understand classroom instructions and tasks that my teacher shares with me.
- My classmates participate in class activities.
- My desk and where I sit in my classroom helps me see and hear my classmates and my teacher.
- My teacher checks with me or my group when we are working.
- When needed, my classmates help me solve problems or overcome challenges when completing class assignment.

Universal Design for Learning

- I can ask my teacher for resources when I need them.
- I have personal learning plans and goals based on my strengths as a student.
- My teacher asks me to write or draw my answers to share more about my learning and knowledge.
- My teacher gives me feedback about my learning.
- My teacher knows me and plans activities that align to my interests or learning style.

Increasing the Cognitive Lift

- Classroom content relates to things in my life.
- I use resources in my classroom to help me answer questions or complete assignments.
- When learning something new, my teacher gives me time to practice the concepts and skills.

Appendix B: SEA General Questions

Table 1: Lower grade responses to "In a typical day, how **often do you pay attention in your classes?"**

	Not much of the day	Some of the day	Most of the day
Spring 2021	2.5%	14.2%	60.9%
Fall 2021	2.5%	28.4%	69.2%
Winter 2022	1.1%	30.7%	67.7%
Spring 2022	0.8%	27.6%	71.0%

Table 2: Upper grade responses to "In a typical day, how often do you pay attention in your classes?"

	None of the day	Not much of the day	Some of the day	Most of the day	All of the day
Spring 2021	0.5%	2.2%	10.2%	63.7%	23.4%
Fall 2021	0.5%	2.4%	11.7%	61.1%	24.2%
Winter 2022	0.4%	2.5%	13.2%	63.4%	19.1%
Spring 2022	0.4%	2.3%	15.4%	61.8%	19.5%

Appendix C: SEA Responses by Lower and Upper Grades and Engagement Domain

Table 1: Percent of lower and upper grade students with high engagement for each domain in each SEA administration

	SY21 Spring	SY22 Fall	SY22 Winter	SY22 Spring
Lower Grades				
Behavioral	57.9%	65.7%	64.6%	62.8%
Cognitive	46.9%	53.4%	53.1%	54.4%
Emotional	68.1%	71.0%	73.0%	73.2%
Upper Grades				
Behavioral	58.9%	61.3%	57.5%	55.6%
Cognitive	45.3%	55.2%	51.9%	54.6%
Emotional	65.9%	69.9%	65.7%	65.8%

Table 2: By grade level Spring SY22 all responses from lower grade students for all SEA questions

	First Grade		Second Grade		Third Grade		Fourth Grade		Fifth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**29.1%**	**70.9%**	**36.4%**	**63.6%**	**38.8%**	**61.2%**	**36.1%**	**63.9%**	**44.2%**	**55.8%**
I raise my hand to show I'm paying attention.	30.9%	69.1%	39.1%	60.9%	42.6%	57.4%	38.4%	61.6%	54.5%	45.5%
I smile or laugh at school.	--	--	--	--	--	--	--	--	--	--
I turn in my homework or assignments.	28.9%	71.1%	33.3%	66.7%	32.8%	67.2%	26.2%	73.8%	26.2%	73.8%
I make eye contact with my teacher.	30.7%	69.3%	43.0%	57.0%	43.7%	56.3%	41.0%	59.0%	53.0%	47.0%
I sit quietly.	25.8%	74.2%	30.1%	69.9%	36.1%	63.9%	39.0%	61.0%	43.1%	56.9%
Cognitive	**39.6%**	**60.4%**	**50.2%**	**49.8%**	**47.8%**	**52.2%**	**44.7%**	**55.3%**	**47.0%**	**53.0%**
I feel challenged by my classwork.	26.5%	73.5%	41.0%	59.0%	39.7%	60.3%	47.4%	52.6%	48.5%	51.5%
I have the chance to share my thoughts in class.	53.9%	46.1%	69.1%	30.9%	64.8%	35.2%	54.7%	45.3%	49.8%	50.2%
I can make choices about my work and learning.	44.6%	55.4%	41.7%	58.3%	47.0%	53.0%	36.1%	63.9%	44.9%	55.1%
I get to ask questions.	43.0%	57.0%	51.1%	48.9%	43.7%	56.3%	36.5%	63.5%	38.7%	61.3%
I share about my learning and thinking.	--	--	--	--	--	--	--	--	--	--
Classroom activities are interesting.	29.1%	70.9%	44.4%	55.6%	45.9%	54.1%	49.2%	50.8%	56.5%	43.5%
I complete the activities in class.	--	--	--	--	--	--	--	--	--	--
I talk with my classmates.	40.5%	59.5%	53.7%	46.3%	45.5%	54.5%	43.8%	56.2%	43.2%	56.8%
I ask questions in class.	--	--	--	--	--	--	--	--	--	--
Emotional	**19.0%**	**81.0%**	**23.9%**	**76.1%**	**25.8%**	**74.2%**	**28.2%**	**71.8%**	**33.4%**	**66.6%**
I feel comfortable sharing my thoughts in class.	--	--	--	--	--	--	--	--	--	--
I believe I am a good student.	21.6%	78.4%	21.5%	78.5%	27.7%	72.3%	22.1%	77.9%	22.7%	77.3%
I want to be a good student.	6.7%	93.3%	11.1%	88.9%	11.1%	88.9%	6.9%	93.1%	8.1%	91.9%
I enjoy being in my classroom.	18.9%	81.1%	30.4%	69.6%	31.9%	68.1%	36.9%	63.1%	53.0%	47.0%

My teacher is happy to have me in their classroom.	8.2%	91.8%	8.1%	91.9%	12.3%	87.7%	16.5%	83.5%	25.6%	74.4%
I feel accepted for who I am and where I come from.	25.2%	74.8%	33.8%	66.2%	31.4%	68.6%	41.1%	58.9%	50.2%	49.8%
I get along with my classmates.	36.6%	63.4%	44.5%	55.5%	45.8%	54.2%	42.2%	57.8%	40.4%	59.6%
I feel safe at school.	19.9%	80.1%	24.4%	75.6%	25.6%	74.4%	31.5%	68.5%	32.2%	67.8%
I get to work with my classmates.	--	--	--	--	--	--	--	--	--	--
Adults at my school help me or care about how I'm doing.	14.0%	86.0%	16.9%	83.1%	20.5%	79.5%	28.1%	71.9%	33.8%	66.2%

Table 3: By grade level Winter SY22 all responses from lower grade students for all SEA questions

	First Grade		Second Grade		Third Grade		Fourth Grade		Fifth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**24.0%**	**76.0%**	**33.0%**	**67.0%**	**29.0%**	**71.0%**	**29.3%**	**70.7%**	**31.0%**	**69.0%**
I raise my hand to show I'm paying attention.	20.0%	80.0%	32.1%	67.9%	24.0%	76.0%	36.1%	63.9%	34.2%	65.8%
I smile or laugh at school.	--	--	--	--	--	--	--	--	--	--
I turn in my homework or assignments.	16.0%	84.0%	21.4%	78.6%	24.0%	76.0%	15.0%	85.0%	8.3%	91.7%
I make eye contact with my teacher.	28.0%	72.0%	42.9%	57.1%	32.0%	68.0%	38.3%	61.7%	47.2%	52.8%
I sit quietly.	32.0%	68.0%	35.7%	64.3%	36.0%	64.0%	27.9%	72.1%	34.2%	65.8%
Cognitive	**41.6%**	**58.4%**	**51.8%**	**48.2%**	**47.7%**	**52.3%**	**49.2%**	**50.8%**	**39.8%**	**60.2%**
I feel challenged by my classwork.	33.3%	66.7%	50.0%	50.0%	36.0%	64.0%	54.1%	45.9%	50.7%	49.3%
I have the chance to share my thoughts in class.	64.0%	36.0%	67.9%	32.1%	75.0%	25.0%	53.3%	46.7%	54.8%	45.2%
I can make choices about my work and learning.	60.0%	40.0%	35.7%	64.3%	52.0%	48.0%	48.3%	51.7%	28.2%	71.8%
I get to ask questions.	36.0%	64.0%	57.1%	42.9%	44.0%	56.0%	42.4%	57.6%	34.7%	65.3%
I share about my learning and thinking.	--	--	--	--	--	--	--	--	--	--
Classroom activities are interesting.	28.0%	72.0%	42.9%	57.1%	48.0%	52.0%	42.6%	57.4%	43.8%	56.2%

	First Grade		Second Grade		Third Grade		Fourth Grade		Fifth Grade	
I complete the activities in class.	--	--	--	--	--	--	--	--	--	--
I talk with my classmates.	28.0%	72.0%	57.1%	42.9%	32.0%	68.0%	54.1%	45.9%	26.0%	74.0%
I ask questions in class.	--	--	--	--	--	--	--	--	--	--
Emotional	**20.0%**	**80.0%**	**29.5%**	**70.5%**	**25.0%**	**75.0%**	**24.5%**	**75.5%**	**22.6%**	**77.4%**
I feel comfortable sharing my thoughts in class.	--	--	--	--	--	--	--	--	--	--
I believe I am a good student.	16.0%	84.0%	10.7%	89.3%	36.0%	64.0%	23.7%	76.3%	26.0%	74.0%
I want to be a good student.	20.0%	80.0%	10.7%	89.3%	8.0%	92.0%	1.7%	98.3%	6.8%	93.2%
I enjoy being in my classroom.	20.0%	80.0%	53.6%	46.4%	48.0%	52.0%	36.7%	63.3%	31.0%	69.0%
My teacher is happy to have me in their classroom.	8.0%	92.0%	14.3%	85.7%	12.0%	88.0%	8.2%	91.8%	15.7%	84.3%
I feel accepted for who I am and where I come from.	24.0%	76.0%	53.6%	46.4%	20.0%	80.0%	31.7%	68.3%	28.8%	71.2%
I get along with my classmates.	28.0%	72.0%	50.0%	50.0%	28.0%	72.0%	32.8%	67.2%	24.7%	75.3%
I feel safe at school.	24.0%	76.0%	32.1%	67.9%	32.0%	68.0%	35.0%	65.0%	26.0%	74.0%
I get to work with my classmates.	--	--	--	--	--	--	--	--	--	--
Adults at my school help me or care about how I'm doing.	20.0%	80.0%	10.7%	89.3%	16.0%	84.0%	26.2%	73.8%	21.9%	78.1%

Table 4: By grade level Fall SY22 all responses from lower grade students for all SEA questions

	First Grade		Second Grade		Third Grade		Fourth Grade		Fifth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**25.7%**	**74.3%**	**31.7%**	**68.3%**	**37.0%**	**63.0%**	**38.3%**	**61.7%**	**36.4%**	**63.6%**
I raise my hand to show I'm paying attention.	25.6%	74.4%	32.8%	67.2%	36.6%	63.4%	49.3%	50.7%	32.5%	67.5%
I smile or laugh at school.	29.3%	70.7%	37.6%	62.4%	39.9%	60.1%	31.2%	68.8%	32.5%	67.5%
I turn in my homework or assignments.	22.6%	77.4%	26.4%	73.6%	25.4%	74.6%	26.8%	73.2%	34.9%	65.1%
I make eye contact with my teacher.	27.1%	72.9%	32.0%	68.0%	46.5%	53.5%	46.4%	53.6%	41.0%	59.0%

I sit quietly.	24.1%	75.9%	29.6%	70.4%	36.6%	63.4%	37.7%	62.3%	41.0%	59.0%
Cognitive	**37.6%**	**62.4%**	**47.5%**	**52.5%**	**48.4%**	**51.6%**	**52.4%**	**47.6%**	**46.2%**	**53.8%**
I feel challenged by my classwork.	41.1%	58.9%	56.5%	43.5%	54.8%	45.2%	65.2%	34.8%	67.1%	32.9%
I have the chance to share my thoughts in class.	48.1%	51.9%	56.8%	43.2%	62.4%	37.6%	69.6%	30.4%	50.6%	49.4%
I can make choices about my work and learning.	44.4%	55.6%	41.6%	58.4%	36.6%	63.4%	41.3%	58.7%	48.8%	51.2%
I get to ask questions.	37.6%	62.4%	48.8%	51.2%	49.8%	50.2%	43.5%	56.5%	28.9%	71.1%
I share about my learning and thinking.	47.4%	52.6%	53.6%	46.4%	59.6%	40.4%	75.4%	24.6%	58.4%	41.6%
Classroom activities are interesting.	28.6%	71.4%	38.4%	61.6%	35.2%	64.8%	42.8%	57.2%	41.0%	59.0%
I complete the activities in class.	32.3%	67.7%	40.0%	60.0%	35.2%	64.8%	34.8%	65.2%	27.7%	72.3%
I talk with my classmates.	31.6%	68.4%	50.4%	49.6%	52.6%	47.4%	51.4%	48.6%	44.6%	55.4%
I ask questions in class.	27.8%	72.2%	41.6%	58.4%	49.8%	50.2%	47.8%	52.2%	48.8%	51.2%
Emotional	**20.2%**	**79.8%**	**26.9%**	**73.1%**	**31.0%**	**69.0%**	**33.8%**	**66.2%**	**31.0%**	**69.0%**
I feel comfortable sharing my thoughts in class.	41.4%	58.6%	55.2%	44.8%	61.5%	38.5%	68.8%	31.2%	61.4%	38.6%
I believe I am a good student.	21.1%	78.9%	21.6%	78.4%	20.7%	79.3%	22.5%	77.5%	22.9%	77.1%
I want to be a good student.	6.8%	93.2%	9.6%	90.4%	7.5%	92.5%	5.8%	94.2%	8.4%	91.6%
I enjoy being in my classroom.	18.0%	82.0%	24.8%	75.2%	31.9%	68.1%	32.6%	67.4%	32.5%	67.5%
My teacher is happy to have me in their classroom.	12.0%	88.0%	13.6%	86.4%	18.8%	81.2%	21.7%	78.3%	20.5%	79.5%
I feel accepted for who I am and where I come from.	21.1%	78.9%	16.0%	84.0%	26.3%	73.7%	28.3%	71.7%	24.7%	75.3%
I get along with my classmates.	20.3%	79.7%	33.6%	66.4%	37.1%	62.9%	36.2%	63.8%	38.0%	62.0%
I feel safe at school.	17.3%	82.7%	28.8%	71.2%	31.9%	68.1%	42.8%	57.2%	26.5%	73.5%
I get to work with my classmates.	26.3%	73.7%	45.6%	54.4%	46.5%	53.5%	43.5%	56.5%	45.8%	54.2%
Adults at my school help me or care about how I'm doing.	17.3%	82.7%	20.0%	80.0%	27.7%	72.3%	35.5%	64.5%	28.9%	71.1%

Table 5: By grade level Spring SY22 all responses from upper grade students (6th-8th grades) for all SEA questions

	Sixth Grade		Seventh Grade		Eighth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**43.5%**	**56.5%**	**47.2%**	**52.8%**	**45.5%**	**54.5%**
I raise my hand to show I'm paying attention.	47.4%	52.6%	56.8%	43.2%	52.1%	47.9%
I nod my head to show I'm paying attention.	--	--	--	--	--	--
I smile or laugh at school.	62.2%	37.8%	60.3%	39.7%	57.7%	42.3%
I turn in my homework or assignments.	14.2%	85.8%	15.1%	84.9%	23.3%	76.7%
I make eye contact with my teacher.	42.2%	57.8%	51.7%	48.3%	45.6%	54.4%
I sit quietly.	31.2%	68.8%	31.4%	68.6%	31.3%	68.7%
Whole group classroom discussions are interesting.	55.4%	44.6%	47.3%	52.7%	54.5%	45.5%
I have the chance to take breaks.	59.8%	40.2%	60.5%	39.5%	62.6%	37.4%
Cognitive	**43.8%**	**56.2%**	**47.6%**	**52.4%**	**50.4%**	**49.6%**
I feel challenged by my classwork.	69.8%	30.2%	73.8%	26.2%	71.0%	29.0%
I can make choices about my work and learning.	29.5%	70.5%	41.5%	58.5%	44.4%	55.6%
I get to ask questions.	26.2%	73.8%	31.2%	68.8%	30.7%	69.3%
I share about my learning and thinking.	55.2%	44.8%	65.2%	34.8%	64.3%	35.7%
Classroom activities are interesting.	57.8%	42.2%	57.6%	42.4%	62.6%	37.4%
I complete the activities in class.	14.6%	85.4%	18.6%	81.4%	22.8%	77.2%
I talk with my classmates.	37.9%	62.1%	39.7%	60.3%	38.1%	61.9%
I ask questions in class.	46.6%	53.4%	53.2%	46.8%	64.4%	35.6%
Emotional	**34.0%**	**66.0%**	**36.6%**	**63.4%**	**35.9%**	**64.1%**
I feel comfortable sharing my thoughts in class.	59.0%	41.0%	56.9%	43.1%	60.6%	39.4%
I believe I am a good student.	26.8%	73.2%	27.1%	72.9%	22.6%	77.4%
I want to be a good student.	8.4%	91.6%	14.6%	85.4%	8.6%	91.4%

I enjoy being in my classroom.	55.2%	44.8%	55.0%	45.0%	57.5%	42.5%
My teacher is happy to have me in their classroom.	19.3%	80.7%	24.1%	75.9%	25.1%	74.9%
I feel accepted for who I am and where I come from.	27.1%	72.9%	30.7%	69.3%	35.9%	64.1%
I get along with my classmates.	23.2%	76.8%	28.6%	71.4%	22.1%	77.9%
I feel safe at school.	29.4%	70.6%	30.1%	69.9%	26.1%	73.9%
I get to work with my classmates.	54.4%	45.6%	57.6%	42.4%	49.7%	50.3%
Adults at my school help me or care about how I'm doing.	27.5%	72.5%	30.7%	69.3%	35.6%	64.4%
I can be myself at school.	44.2%	55.8%	47.1%	52.9%	50.8%	49.2%

Table 6: By grade level Winter SY22 all responses from upper grade students (6th-8th grades) for all SEA questions

	Sixth Grade		Seventh Grade		Eighth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**42.4%**	**57.6%**	**47.3%**	**52.7%**	**45.4%**	**54.6%**
I raise my hand to show I'm paying attention.	44.4%	55.6%	48.1%	51.9%	52.3%	47.7%
I nod my head to show I'm paying attention.	53.7%	46.3%	56.9%	43.1%	51.2%	48.8%
I smile or laugh at school.	60.6%	39.4%	66.9%	33.1%	60.2%	39.8%
I turn in my homework or assignments.	16.7%	83.3%	15.7%	84.3%	21.5%	78.5%
I make eye contact with my teacher.	45.1%	54.9%	55.9%	44.1%	51.2%	48.8%
I sit quietly.	28.0%	72.0%	36.4%	63.6%	34.9%	65.1%
Whole group classroom discussions are interesting.	57.2%	42.8%	48.4%	51.6%	49.7%	50.3%
I have the chance to take breaks.	59.4%	40.6%	71.4%	28.6%	65.1%	34.9%
Cognitive	**49.0%**	**51.0%**	**48.9%**	**51.1%**	**51.6%**	**48.4%**
I feel challenged by my classwork.	77.5%	22.5%	73.9%	26.1%	78.0%	22.0%
I can make choices about my work and learning.	32.6%	67.4%	47.4%	52.6%	41.6%	58.4%
I get to ask questions.	31.0%	69.0%	27.4%	72.6%	27.3%	72.7%
I share about my learning and thinking.	56.5%	43.5%	57.8%	42.2%	63.0%	37.0%

	Sixth Grade		Seventh Grade		Eighth Grade	
Classroom activities are interesting.	57.2%	42.8%	55.8%	44.2%	61.8%	38.2%
I complete the activities in class.	18.4%	81.6%	15.6%	84.4%	19.9%	80.1%
I talk with my classmates.	44.4%	55.6%	43.7%	56.3%	36.3%	63.7%
I ask questions in class.	47.4%	52.6%	48.4%	51.6%	61.8%	38.2%
Emotional	**36.1%**	**63.9%**	**37.2%**	**62.8%**	**35.9%**	**64.1%**
I feel comfortable sharing my thoughts in class.	63.6%	36.4%	56.4%	43.6%	56.1%	43.9%
I believe I am a good student.	27.8%	72.2%	24.4%	75.6%	29.3%	70.7%
I want to be a good student.	13.1%	86.9%	10.3%	89.7%	14.1%	85.9%
I enjoy being in my classroom.	48.8%	51.2%	58.3%	41.7%	55.0%	45.0%
My teacher is happy to have me in their classroom.	24.5%	75.5%	30.9%	69.1%	31.0%	69.0%
I feel accepted for who I am and where I come from.	33.8%	66.2%	33.6%	66.4%	29.1%	70.9%
I get along with my classmates.	29.2%	70.8%	28.4%	71.6%	22.9%	77.1%
I feel safe at school.	27.6%	72.4%	27.4%	72.6%	20.8%	79.2%
I get to work with my classmates.	51.2%	48.8%	60.9%	39.1%	64.5%	35.5%
Adults at my school help me or care about how I'm doing.	29.7%	70.3%	28.6%	71.4%	31.2%	68.8%
I can be myself at school.	48.1%	51.9%	50.0%	50.0%	41.0%	59.0%

Table 7: By grade level Fall SY22 all responses from upper grade students (6th-8th grades) for all SEA questions

	Sixth Grade		Seventh Grade		Eighth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**35.3%**	**64.7%**	**42.2%**	**57.8%**	**39.8%**	**60.2%**
I raise my hand to show I'm paying attention.	36.4%	63.6%	46.1%	53.9%	43.7%	56.3%
I nod my head to show I'm paying attention.	40.3%	59.7%	45.4%	54.6%	42.5%	57.5%
I smile or laugh at school.	54.0%	46.0%	57.8%	42.2%	57.5%	42.5%
I turn in my homework or assignments.	13.7%	86.3%	14.4%	85.6%	18.1%	81.9%
I make eye contact with my teacher.	34.8%	65.2%	51.6%	48.4%	40.6%	59.4%

I sit quietly.	23.3%	76.7%	37.5%	62.5%	31.5%	68.5%
Whole group classroom discussions are interesting.	44.4%	55.6%	45.8%	54.2%	45.9%	54.1%
I have the chance to take breaks.	55.6%	44.4%	57.3%	42.7%	61.2%	38.8%
Cognitive	**44.1%**	**55.9%**	**46.8%**	**53.2%**	**47.1%**	**52.9%**
I feel challenged by my classwork.	75.6%	24.4%	72.9%	27.1%	73.5%	26.5%
I can make choices about my work and learning.	31.9%	68.1%	39.3%	60.7%	37.4%	62.6%
I get to ask questions.	23.7%	76.3%	27.3%	72.7%	23.2%	76.8%
I share about my learning and thinking.	56.9%	43.1%	58.9%	41.1%	59.6%	40.4%
Classroom activities are interesting.	40.7%	59.3%	56.1%	43.9%	51.4%	48.6%
I complete the activities in class.	17.3%	82.7%	13.4%	86.6%	18.0%	82.0%
I talk with my classmates.	41.2%	58.8%	37.7%	62.3%	35.3%	64.7%
I ask questions in class.	44.1%	55.9%	49.3%	50.7%	55.4%	44.6%
Emotional	**28.7%**	**71.3%**	**31.8%**	**68.2%**	**29.2%**	**70.8%**
I feel comfortable sharing my thoughts in class.	57.7%	42.3%	57.1%	42.9%	53.5%	46.5%
I believe I am a good student.	22.6%	77.4%	27.7%	72.3%	23.1%	76.9%
I want to be a good student.	7.3%	92.7%	9.6%	90.4%	12.5%	87.5%
I enjoy being in my classroom.	41.3%	58.7%	47.2%	52.8%	40.6%	59.4%
My teacher is happy to have me in their classroom.	19.1%	80.9%	28.6%	71.4%	20.0%	80.0%
I feel accepted for who I am and where I come from.	19.7%	80.3%	24.5%	75.5%	24.0%	76.0%
I get along with my classmates.	20.9%	79.1%	22.8%	77.2%	20.5%	79.5%
I feel safe at school.	26.3%	73.7%	21.8%	78.2%	17.6%	82.4%
I get to work with my classmates.	46.8%	53.2%	44.8%	55.2%	48.8%	51.2%
Adults at my school help me or care about how I'm doing.	15.9%	84.1%	27.4%	72.6%	23.2%	76.8%
I can be myself at school.	37.9%	62.1%	37.8%	62.2%	37.5%	62.5%

Table 8: By grade level Spring SY22 all responses from upper grade students (9th-12th grades) for all SEA questions

	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**47.3%**	**52.7%**	**47.0%**	**53.0%**	**34.1%**	**65.9%**	**35.0%**	**65.0%**
I raise my hand to show I'm paying attention.	62.0%	38.0%	63.1%	36.9%	57.4%	42.6%	52.9%	47.1%
I nod my head to show I'm paying attention.	--	--	--	--	--	--	--	--
I smile or laugh at school.	55.4%	44.6%	54.5%	45.5%	53.2%	46.8%	46.0%	54.0%
I turn in my homework or assignments.	23.9%	76.1%	16.9%	83.1%	13.0%	87.0%	15.7%	84.3%
I make eye contact with my teacher.	50.5%	49.5%	46.3%	53.7%	31.9%	68.1%	33.3%	66.7%
I sit quietly.	37.0%	63.0%	37.3%	62.7%	25.5%	74.5%	23.5%	76.5%
Whole group classroom discussions are interesting.	45.1%	54.9%	43.1%	56.9%	19.1%	80.9%	36.5%	63.5%
I have the chance to take breaks.	64.1%	35.9%	68.2%	31.8%	31.9%	68.1%	42.3%	57.7%
Cognitive	**45.4%**	**54.6%**	**49.6%**	**50.4%**	**30.7%**	**69.3%**	**34.5%**	**65.5%**
I feel challenged by my classwork.	59.8%	40.2%	59.7%	40.3%	51.1%	48.9%	48.1%	51.9%
I can make choices about my work and learning.	42.9%	57.1%	50.8%	49.2%	36.2%	63.8%	36.5%	63.5%
I get to ask questions.	13.0%	87.0%	19.7%	80.3%	4.3%	95.7%	7.7%	92.3%
I share about my learning and thinking.	63.0%	37.0%	67.7%	32.3%	42.6%	57.4%	33.3%	66.7%
Classroom activities are interesting.	65.2%	34.8%	63.6%	36.4%	31.8%	68.2%	48.1%	51.9%
I complete the activities in class.	20.0%	80.0%	21.2%	78.8%	8.9%	91.1%	7.8%	92.2%
I talk with my classmates.	44.0%	56.0%	51.5%	48.5%	46.8%	53.2%	49.0%	51.0%
I ask questions in class.	55.6%	44.4%	68.7%	31.3%	34.8%	65.2%	43.1%	56.9%
Emotional	**32.1%**	**67.9%**	**36.4%**	**63.6%**	**23.4%**	**76.6%**	**29.8%**	**70.2%**
I feel comfortable sharing my thoughts in class.	52.2%	47.8%	54.5%	45.5%	30.4%	69.6%	33.3%	66.7%
I believe I am a good student.	29.3%	70.7%	25.0%	75.0%	17.4%	82.6%	32.7%	67.3%
I want to be a good student.	10.9%	89.1%	14.9%	85.1%	10.6%	89.4%	7.7%	92.3%

	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
I enjoy being in my classroom.	47.3%	52.7%	49.3%	50.7%	33.3%	66.7%	42.3%	57.7%
My teacher is happy to have me in their classroom.	30.4%	69.6%	27.3%	72.7%	14.9%	85.1%	23.1%	76.9%
I feel accepted for who I am and where I come from.	26.1%	73.9%	34.3%	65.7%	21.3%	78.7%	23.1%	76.9%
I get along with my classmates.	14.1%	85.9%	24.2%	75.8%	15.2%	84.8%	21.2%	78.8%
I feel safe at school.	14.1%	85.9%	22.4%	77.6%	14.9%	85.1%	9.6%	90.4%
I get to work with my classmates.	65.2%	34.8%	72.7%	27.3%	44.7%	55.3%	55.8%	44.2%
Adults at my school help me or care about how I'm doing.	34.8%	65.2%	36.4%	63.6%	21.3%	78.7%	39.2%	60.8%
I can be myself at school.	28.6%	71.4%	39.4%	60.6%	34.0%	66.0%	40.4%	59.6%

Table 9: By grade level Winter SY22 all responses from upper grade students (9th-12th grades) for all SEA questions

	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**42.6%**	**57.4%**	**41.6%**	**58.4%**	**31.0%**	**69.0%**	**33.3%**	**66.7%**
I raise my hand to show I'm paying attention.	57.3%	42.7%	57.8%	42.2%	59.6%	40.4%	59.3%	40.7%
I nod my head to show I'm paying attention.	54.9%	45.1%	45.3%	54.7%	24.6%	75.4%	30.2%	69.8%
I smile or laugh at school.	58.5%	41.5%	57.8%	42.2%	44.6%	55.4%	42.6%	57.4%
I turn in my homework or assignments.	17.1%	82.9%	14.3%	85.7%	12.3%	87.7%	18.5%	81.5%
I make eye contact with my teacher.	47.6%	52.4%	43.8%	56.3%	26.3%	73.7%	38.9%	61.1%
I sit quietly.	34.1%	65.9%	25.0%	75.0%	26.3%	73.7%	29.6%	70.4%
Whole group classroom discussions are interesting.	46.3%	53.7%	53.1%	46.9%	22.8%	77.2%	24.1%	75.9%
I have the chance to take breaks.	54.9%	45.1%	65.6%	34.4%	40.4%	59.6%	37.0%	63.0%
Cognitive	**47.7%**	**52.3%**	**55.1%**	**44.9%**	**34.1%**	**65.9%**	**33.6%**	**66.4%**
I feel challenged by my classwork.	78.0%	22.0%	67.2%	32.8%	50.9%	49.1%	44.4%	55.6%
I can make choices about my work and learning.	43.2%	56.8%	50.0%	50.0%	38.6%	61.4%	25.9%	74.1%
I get to ask questions.	16.0%	84.0%	23.8%	76.2%	14.0%	86.0%	9.4%	90.6%
I share about my learning and thinking.	52.5%	47.5%	65.1%	34.9%	47.4%	52.6%	48.1%	51.9%

	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Classroom activities are interesting.	58.5%	41.5%	61.9%	38.1%	37.5%	62.5%	43.4%	56.6%
I complete the activities in class.	15.9%	84.1%	20.3%	79.7%	3.5%	96.5%	9.3%	90.7%
I talk with my classmates.	37.0%	63.0%	62.5%	37.5%	36.8%	63.2%	37.3%	62.7%
I ask questions in class.	50.0%	50.0%	60.9%	39.1%	35.1%	64.9%	37.0%	63.0%
Emotional	**29.6%**	**70.4%**	**36.5%**	**63.5%**	**25.6%**	**74.4%**	**26.1%**	**73.9%**
I feel comfortable sharing my thoughts in class.	51.9%	48.1%	51.6%	48.4%	42.1%	57.9%	40.7%	59.3%
I believe I am a good student.	23.2%	76.8%	32.8%	67.2%	24.6%	75.4%	22.2%	77.8%
I want to be a good student.	11.3%	88.8%	15.9%	84.1%	8.8%	91.2%	3.7%	96.3%
I enjoy being in my classroom.	52.4%	47.6%	53.1%	46.9%	29.8%	70.2%	48.1%	51.9%
My teacher is happy to have me in their classroom.	27.2%	72.8%	27.0%	73.0%	15.8%	84.2%	18.5%	81.5%
I feel accepted for who I am and where I come from.	18.5%	81.5%	31.3%	68.8%	23.2%	76.8%	17.3%	82.7%
I get along with my classmates.	14.6%	85.4%	18.8%	81.3%	17.5%	82.5%	18.5%	81.5%
I feel safe at school.	12.2%	87.8%	20.3%	79.7%	14.0%	86.0%	11.1%	88.9%
I get to work with my classmates.	64.6%	35.4%	71.4%	28.6%	43.9%	56.1%	52.8%	47.2%
Adults at my school help me or care about how I'm doing.	28.0%	72.0%	39.1%	60.9%	15.8%	84.2%	22.2%	77.8%
I can be myself at school.	21.3%	78.8%	40.6%	59.4%	45.6%	54.4%	32.1%	67.9%

Table 10: By grade level Fall SY22 all responses from upper grade students (9th-12th grades) for all SEA questions

	Ninth Grade		Tenth Grade		Eleventh Grade		Twelfth Grade	
	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More	Less Often	Most of the Time or More
Behavioral	**40.0%**	**60.0%**	**39.1%**	**60.9%**	**37.5%**	**62.5%**	**36.1%**	**63.9%**
I raise my hand to show I'm paying attention.	55.9%	44.1%	62.4%	37.6%	59.3%	40.7%	62.3%	37.7%
I nod my head to show I'm paying attention.	42.4%	57.6%	42.2%	57.8%	36.2%	63.8%	28.3%	71.7%
I smile or laugh at school.	55.9%	44.1%	62.7%	37.3%	52.5%	47.5%	50.9%	49.1%
I turn in my homework or assignments.	14.1%	85.9%	8.3%	91.7%	13.6%	86.4%	15.7%	84.3%
I make eye contact with my teacher.	41.8%	58.2%	40.4%	59.6%	35.6%	64.4%	34.0%	66.0%

I sit quietly.	35.2%	64.8%	23.6%	76.4%	32.2%	67.8%	30.2%	69.8%
Whole group classroom discussions are interesting.	41.3%	58.7%	39.4%	60.6%	33.9%	66.1%	22.6%	77.4%
I have the chance to take breaks.	59.1%	40.9%	53.6%	46.4%	56.9%	43.1%	47.2%	52.8%
Cognitive	**44.5%**	**55.5%**	**43.9%**	**56.1%**	**40.9%**	**59.1%**	**32.6%**	**67.4%**
I feel challenged by my classwork.	74.2%	25.8%	51.8%	48.2%	55.9%	44.1%	35.8%	64.2%
I can make choices about my work and learning.	37.0%	63.0%	33.6%	66.4%	25.9%	74.1%	19.2%	80.8%
I get to ask questions.	15.1%	84.9%	19.3%	80.7%	13.8%	86.2%	19.2%	80.8%
I share about my learning and thinking.	53.8%	46.2%	54.3%	45.7%	48.3%	51.7%	40.4%	59.6%
Classroom activities are interesting.	48.9%	51.1%	49.5%	50.5%	55.2%	44.8%	43.4%	56.6%
I complete the activities in class.	14.0%	86.0%	11.8%	88.2%	10.2%	89.8%	13.2%	86.8%
I talk with my classmates.	35.2%	64.8%	56.0%	44.0%	50.8%	49.2%	45.3%	54.7%
I ask questions in class.	51.6%	48.4%	55.0%	45.0%	47.5%	52.5%	41.2%	58.8%
Emotional	**30.3%**	**69.7%**	**32.0%**	**68.0%**	**32.9%**	**67.1%**	**28.1%**	**71.9%**
I feel comfortable sharing my thoughts in class.	47.3%	52.7%	46.4%	53.6%	45.8%	54.2%	35.8%	64.2%
I believe I am a good student.	24.7%	75.3%	29.2%	70.8%	30.5%	69.5%	32.1%	67.9%
I want to be a good student.	14.1%	85.9%	9.2%	90.8%	3.4%	96.6%	7.5%	92.5%
I enjoy being in my classroom.	47.3%	52.7%	54.7%	45.3%	41.4%	58.6%	40.4%	59.6%
My teacher is happy to have me in their classroom.	21.3%	78.7%	19.4%	80.6%	25.4%	74.6%	24.5%	75.5%
I feel accepted for who I am and where I come from.	14.1%	85.9%	32.1%	67.9%	27.6%	72.4%	25.0%	75.0%
I get along with my classmates.	16.3%	83.7%	13.8%	86.2%	27.1%	72.9%	22.6%	77.4%
I feel safe at school.	14.1%	85.9%	20.9%	79.1%	23.7%	76.3%	13.2%	86.8%
I get to work with my classmates.	67.7%	32.3%	60.9%	39.1%	64.4%	35.6%	55.8%	44.2%
Adults at my school help me or care about how I'm doing.	29.2%	70.8%	27.3%	72.7%	27.1%	72.9%	18.9%	81.1%
I can be myself at school.	35.5%	64.5%	38.0%	62.0%	45.8%	54.2%	34.0%	66.0%

Appendix D: SEA Results by Gender and Engagement Domain

Table 1: By gender percent of students with high engagement for each domain in SY22

	SY22 Fall		SY22 Winter		SY22 Spring	
	Female	Male	Female	Male	Female	Male
Behavioral	64.8%	59.2%	62.9%	56.4%	60.3%	54.8%
Cognitive	54.4%	54.4%	54.1%	50.8%	55.5%	53.0%
Emotional	71.2%	69.0%	69.7%	68.2%	69.5%	67.8%

Table 2: By gender Spring SY22 all responses from lower grade students for all SEA questions

	Female Students		Male Students	
	Sometimes or Less Often	Most of the Time or More Often	Sometimes or Less Often	Most of the Time or More Often
Behavioral	**34.2%**	**65.8%**	**40.6%**	**59.4%**
I raise my hand to show I'm paying attention.	39.2%	60.8%	44.2%	55.8%
I smile or laugh at school.	--	--	--	--
I turn in my homework or assignments.	27.2%	72.8%	30.3%	69.7%
I make eye contact with my teacher.	40.6%	59.4%	45.1%	54.9%
I sit quietly.	29.8%	70.2%	42.6%	57.4%
Cognitive	**43.2%**	**56.8%**	**48.3%**	**51.7%**
I feel challenged by my classwork.	40.7%	59.3%	43.3%	56.7%
I have the chance to share my thoughts in class.	55.2%	44.8%	59.1%	40.9%
I can make choices about my work and learning.	38.9%	61.1%	45.8%	54.2%
I get to ask questions.	37.1%	62.9%	46.2%	53.8%
I share about my learning and thinking.	--	--	--	--
Classroom activities are interesting.	41.6%	58.4%	51.1%	48.9%
I complete the activities in class.	--	--	--	--
I talk with my classmates.	45.6%	54.4%	44.0%	56.0%
I ask questions in class.	--	--	--	--
Emotional	**24.8%**	**75.2%**	**28.9%**	**71.1%**
I feel comfortable sharing my thoughts in class.	--	--	--	--
I believe I am a good student.	16.2%	83.8%	30.3%	69.7%
I want to be a good student.	5.6%	94.4%	11.6%	88.4%
I enjoy being in my classroom.	32.7%	67.3%	39.5%	60.5%
My teacher is happy to have me in their classroom.	12.2%	87.8%	18.8%	81.2%
I feel accepted for who I am and where I come from.	37.3%	62.7%	38.7%	61.3%
I get along with my classmates.	44.7%	55.3%	38.1%	61.9%

	26.6%	73.4%	28.7%	71.3%
I feel safe at school.	26.6%	73.4%	28.7%	71.3%
I get to work with my classmates.	--	--	--	--
Adults at my school help me or care about how I'm doing.	22.7%	77.3%	25.5%	74.5%

Table 3: By gender Winter SY22 all responses from lower grade students for all SEA questions

	Female Students		Male Students	
	Sometimes or Less Often	Most of the Time or More Often	Sometimes or Less Often	Most of the Time or More Often
Behavioral	**30.8%**	**69.2%**	**40.2%**	**59.8%**
I raise my hand to show I'm paying attention.	35.2%	64.8%	45.5%	54.5%
I smile or laugh at school.	--	--	--	--
I turn in my homework or assignments.	22.7%	77.3%	29.8%	70.2%
I make eye contact with my teacher.	41.1%	58.9%	43.6%	56.4%
I sit quietly.	24.4%	75.6%	41.7%	58.3%
Cognitive	**43.9%**	**56.1%**	**50.1%**	**49.9%**
I feel challenged by my classwork.	43.2%	56.8%	45.4%	54.6%
I have the chance to share my thoughts in class.	59.1%	40.9%	65.8%	34.2%
I can make choices about my work and learning.	41.4%	58.6%	49.3%	50.7%
I get to ask questions.	36.9%	63.1%	46.0%	54.0%
I share about my learning and thinking.	--	--	--	--
Classroom activities are interesting.	38.4%	61.6%	50.9%	49.1%
I complete the activities in class.	--	--	--	--
I talk with my classmates.	44.2%	55.8%	43.3%	56.7%
I ask questions in class.	--	--	--	--
Emotional	**24.4%**	**75.6%**	**29.6%**	**70.4%**
I feel comfortable sharing my thoughts in class.	--	--	--	--
I believe I am a good student.	16.3%	83.7%	31.9%	68.1%
I want to be a good student.	5.8%	94.2%	12.0%	88.0%
I enjoy being in my classroom.	34.4%	65.6%	42.2%	57.8%
My teacher is happy to have me in their classroom.	12.3%	87.7%	15.3%	84.7%
I feel accepted for who I am and where I come from.	33.9%	66.1%	39.4%	60.6%
I get along with my classmates.	38.9%	61.1%	39.0%	61.0%
I feel safe at school.	29.6%	70.4%	29.2%	70.8%
I get to work with my classmates.	--	--	--	--
Adults at my school help me or care about how I'm doing.	24.1%	75.9%	28.1%	71.9%

Table 4: By gender Fall SY22 all responses from lower grade students for all SEA questions

	Female Students		Male Students	
	Sometimes or Less Often	Most of the Time or More Often	Sometimes or Less Often	Most of the Time or More Often
Behavioral	**29.5%**	**70.5%**	**39.6%**	**60.4%**
I raise my hand to show I'm paying attention.	31.1%	68.9%	40.3%	59.7%
I smile or laugh at school.	29.9%	70.1%	39.8%	60.2%
I turn in my homework or assignments.	25.6%	74.4%	29.3%	70.7%
I make eye contact with my teacher.	33.8%	66.2%	46.0%	54.0%
I sit quietly.	26.9%	73.1%	42.7%	57.3%
Cognitive	**45.2%**	**54.8%**	**48.2%**	**51.8%**
I feel challenged by my classwork.	56.3%	43.7%	58.4%	41.6%
I have the chance to share my thoughts in class.	56.0%	44.0%	59.9%	40.1%
I can make choices about my work and learning.	40.8%	59.2%	43.8%	56.2%
I get to ask questions.	40.0%	60.0%	43.8%	56.2%
I share about my learning and thinking.	56.5%	43.5%	62.1%	37.9%
Classroom activities are interesting.	34.3%	65.7%	40.3%	59.7%
I complete the activities in class.	32.3%	67.7%	35.5%	64.5%
I talk with my classmates.	48.5%	51.5%	44.9%	55.1%
I ask questions in class.	42.8%	57.2%	45.4%	54.6%
Emotional	**26.0%**	**74.0%**	**32.3%**	**67.7%**
I feel comfortable sharing my thoughts in class.	56.2%	43.8%	60.8%	39.2%
I believe I am a good student.	16.7%	83.3%	27.2%	72.8%
I want to be a good student.	7.0%	93.0%	8.3%	91.7%
I enjoy being in my classroom.	22.9%	77.1%	34.9%	65.1%
My teacher is happy to have me in their classroom.	12.9%	87.1%	22.8%	77.2%
I feel accepted for who I am and where I come from.	23.6%	76.4%	23.9%	76.1%
I get along with my classmates.	30.6%	69.4%	37.1%	62.9%
I feel safe at school.	27.1%	72.9%	32.5%	67.5%
I get to work with my classmates.	41.0%	59.0%	43.5%	56.5%
Adults at my school help me or care about how I'm doing.	21.6%	78.4%	31.5%	68.5%

Table 5: By gender Spring SY22 all responses from upper grade students for all SEA questions

	Female Students		Male Students	
	Sometimes or Less Often	Most of the Time or More Often	Sometimes or Less Often	Most of the Time or More Often
Behavioral	**42.2%**	**57.8%**	**48.4%**	**51.6%**
I raise my hand to show I'm paying attention.	52.7%	47.3%	56.2%	43.8%
I nod my head to show I'm paying attention.	40.9%	59.1%	52.9%	47.1%
I smile or laugh at school.	53.8%	46.2%	65.9%	34.1%
I turn in my homework or assignments.	18.1%	81.9%	16.7%	83.3%
I make eye contact with my teacher.	43.9%	56.1%	47.4%	52.6%
I sit quietly.	29.5%	70.5%	35.3%	64.7%
Whole group classroom discussions are interesting.	50.2%	49.8%	45.6%	54.4%
I have the chance to take breaks.	56.4%	43.6%	64.0%	36.0%
Cognitive	**45.2%**	**54.8%**	**45.9%**	**54.1%**
I feel challenged by my classwork.	66.9%	33.1%	67.3%	32.7%
I can make choices about my work and learning.	37.5%	62.5%	41.8%	58.2%
I get to ask questions.	22.8%	77.2%	27.0%	73.0%
I share about my learning and thinking.	59.1%	40.9%	59.4%	40.6%
Classroom activities are interesting.	57.5%	42.5%	59.3%	40.7%
I complete the activities in class.	18.1%	81.9%	16.9%	83.1%
I talk with my classmates.	40.1%	59.9%	42.8%	57.2%
I ask questions in class.	54.4%	45.6%	52.4%	47.6%
Emotional	**33.7%**	**66.3%**	**35.0%**	**65.0%**
I feel comfortable sharing my thoughts in class.	57.9%	42.1%	49.8%	50.2%
I believe I am a good student.	23.7%	76.3%	29.9%	70.1%
I want to be a good student.	9.3%	90.7%	13.1%	86.9%
I enjoy being in my classroom.	52.4%	47.6%	52.9%	47.1%
My teacher is happy to have me in their classroom.	20.1%	79.9%	29.1%	70.9%
I feel accepted for who I am and where I come from.	31.4%	68.6%	26.7%	73.3%
I get along with my classmates.	25.0%	75.0%	19.0%	81.0%
I feel safe at school.	25.6%	74.4%	23.7%	76.3%
I get to work with my classmates.	51.2%	48.8%	64.7%	35.3%
Adults at my school help me or care about how I'm doing.	30.4%	69.6%	33.9%	66.1%
I can be myself at school.	44.2%	55.8%	42.6%	57.4%

Table 6: By gender Winter SY22 all responses from upper grade students for all SEA questions

	Female Students		Male Students	
	Sometimes or Less Often	Most of the Time or More Often	Sometimes or Less Often	Most of the Time or More Often
Behavioral	**40.2%**	**59.8%**	**45.8%**	**54.2%**
I raise my hand to show I'm paying attention.	49.0%	51.0%	54.5%	45.5%
I nod my head to show I'm paying attention.	47.2%	52.8%	52.9%	47.1%
I smile or laugh at school.	53.4%	46.6%	66.7%	33.3%
I turn in my homework or assignments.	16.6%	83.4%	18.1%	81.9%
I make eye contact with my teacher.	46.2%	53.8%	47.7%	52.3%
I sit quietly.	26.9%	73.1%	37.8%	62.2%
Whole group classroom discussions are interesting.	47.0%	53.0%	48.8%	51.2%
I have the chance to take breaks.	57.4%	42.6%	63.7%	36.3%
Cognitive	**47.4%**	**52.6%**	**48.3%**	**51.7%**
I feel challenged by my classwork.	70.0%	30.0%	74.9%	25.1%
I can make choices about my work and learning.	39.7%	60.3%	40.1%	59.9%
I get to ask questions.	24.8%	75.2%	24.7%	75.3%
I share about my learning and thinking.	57.9%	42.1%	56.3%	43.8%
Classroom activities are interesting.	56.2%	43.8%	56.1%	43.9%
I complete the activities in class.	15.4%	84.6%	17.8%	82.2%
I talk with my classmates.	43.1%	56.9%	40.9%	59.1%
I ask questions in class.	50.1%	49.9%	51.1%	48.9%
Emotional	**34.5%**	**65.5%**	**33.9%**	**66.1%**
I feel comfortable sharing my thoughts in class.	59.5%	40.5%	49.7%	50.3%
I believe I am a good student.	26.0%	74.0%	27.8%	72.2%
I want to be a good student.	8.8%	91.2%	16.0%	84.0%
I enjoy being in my classroom.	51.9%	48.1%	50.4%	49.6%
My teacher is happy to have me in their classroom.	24.6%	75.4%	29.3%	70.7%
I feel accepted for who I am and where I come from.	32.8%	67.2%	24.1%	75.9%
I get along with my classmates.	24.6%	75.4%	22.7%	77.3%
I feel safe at school.	23.9%	76.1%	19.1%	80.9%
I get to work with my classmates.	55.7%	44.3%	62.3%	37.7%
Adults at my school help me or care about how I'm doing.	27.1%	72.9%	31.4%	68.6%
I can be myself at school.	44.5%	55.5%	39.5%	60.5%

Table 7: By gender Fall SY22 all responses from upper grade students for all SEA questions

	Female Students		Male Students	
	Sometimes or Less Often	Most of the Time or More Often	Sometimes or Less Often	Most of the Time or More Often
Behavioral	**37.4%**	**62.6%**	**41.6%**	**58.4%**
I raise my hand to show I'm paying attention.	46.6%	53.4%	49.4%	50.6%
I nod my head to show I'm paying attention.	36.1%	63.9%	51.3%	48.7%
I smile or laugh at school.	54.0%	46.0%	61.2%	38.8%
I turn in my homework or assignments.	15.4%	84.6%	12.8%	87.2%
I make eye contact with my teacher.	41.9%	58.1%	39.6%	60.4%
I sit quietly.	29.0%	71.0%	33.0%	67.0%
Whole group classroom discussions are interesting.	45.2%	54.8%	37.8%	62.2%
I have the chance to take breaks.	54.6%	45.4%	61.6%	38.4%
Cognitive	**45.8%**	**54.2%**	**42.7%**	**57.3%**
I feel challenged by my classwork.	68.5%	31.5%	68.9%	31.1%
I can make choices about my work and learning.	37.0%	63.0%	30.0%	70.0%
I get to ask questions.	21.8%	78.2%	23.1%	76.9%
I share about my learning and thinking.	57.6%	42.4%	53.4%	46.6%
Classroom activities are interesting.	50.2%	49.8%	47.9%	52.1%
I complete the activities in class.	17.2%	82.8%	11.3%	88.7%
I talk with my classmates.	38.3%	61.7%	45.4%	54.6%
I ask questions in class.	51.9%	48.1%	46.4%	53.6%
Emotional	**30.4%**	**69.6%**	**29.9%**	**70.1%**
I feel comfortable sharing my thoughts in class.	55.2%	44.8%	47.8%	52.2%
I believe I am a good student.	24.5%	75.5%	27.7%	72.3%
I want to be a good student.	7.2%	92.8%	14.2%	85.8%
I enjoy being in my classroom.	45.5%	54.5%	42.1%	57.9%
My teacher is happy to have me in their classroom.	21.8%	78.2%	23.2%	76.8%
I feel accepted for who I am and where I come from.	25.9%	74.1%	18.7%	81.3%
I get along with my classmates.	21.8%	78.2%	18.0%	82.0%
I feel safe at school.	21.7%	78.3%	18.9%	81.1%
I get to work with my classmates.	47.9%	52.1%	58.8%	41.2%
Adults at my school help me or care about how I'm doing.	24.0%	76.0%	22.6%	77.4%
I can be myself at school.	38.3%	61.7%	37.0%	63.0%

Appendix E: Intervention-Specific SEA Questions

Table 1: For Cooperative Learning, percent of students with high engagement for intervention-specific questions

	SY22 Fall	SY22 Winter	SY22 Spring
Carbondale Community School			
I understand classroom instructions and tasks that my teacher shares with me.	64.0%	68.4%	70.9%
My classmates participate in class activities.	53.1%	59.6%	62.7%
My desk and where I sit in my classroom helps me see and hear my classmates and my teacher.	84.8%	76.0%	72.4%
My teacher checks with me or my group when we are working.	50.0%	48.9%	72.4%
When needed, my classmates help me solve problems or overcome challenges when completing class assignment.	63.3%	69.1%	57.9%
STRIVE Prep Montbello			
I understand classroom instructions and tasks that my teacher shares with me.	57.1%	57.1%	N/A
My classmates participate in class activities.	54.0%	51.9%	N/A
My desk and where I sit in my classroom helps me see and hear my classmates and my teacher.	63.4%	66.7%	N/A
My teacher checks with me or my group when we are working.	41.2%	47.0%	N/A
When needed, my classmates help me solve problems or overcome challenges when completing class assignment.	48.0%	47.6%	N/A

Table 2: For Universal Design for Learning, percent of students with high engagement for intervention-specific questions

	SY22 Fall	SY22 Winter	SY22 Spring
Animas High School			
I can ask my teacher for resources when I need them.	57.9%	50.0%	N/A
I have personal learning plans and goals based on my strengths as a student.	93.8%	100.0%	N/A
My teacher asks me to write or draw my answers to share more about my learning and knowledge.	38.5%	0.0%	N/A
My teacher gives me feedback about my learning.	71.4%	50.0%	N/A
My teacher knows me and plans activities that align to my interests or learning style.	45.2%	50.0%	N/A
REACH Charter School			
I can ask my teacher for resources when I need them.	70.6%	71.0%	88.0%

I have personal learning plans and goals based on my strengths as a student.	0.0%	67.7%	N/A
My teacher asks me to write or draw my answers to share more about my learning and knowledge.	50.0%	--	64.0%
My teacher gives me feedback about my learning.	67.6%	67.7%	68.0%
My teacher knows me and plans activities that align to my interests or learning style.	--	--	N/A
Thomas MacLaren School			
I can ask my teacher for resources when I need them.	37.8%	44.7%	60.7%
I have personal learning plans and goals based on my strengths as a student.	51.1%	69.5%	53.5%
My teacher asks me to write or draw my answers to share more about my learning and knowledge.	22.1%	21.7%	38.9%
My teacher gives me feedback about my learning.	47.9%	54.3%	51.2%
My teacher knows me and plans activities that align to my interests or learning style.	40.0%	53.7%	18.2%

Table 3: For Increasing the Cognitive Lift, percent of students with high engagement for intervention-specific questions

	SY22 Fall	SY22 Winter	SY22 Spring
Academy 360			
Classroom content relates to things in my life.	57.4%	44.4%	33.3%
I use resources in my classroom to help me answer questions or complete assignments.	65.6%	79.6%	48.1%
When learning something new, my teacher gives me time to practice the concepts and skills.	55.7%	33.3%	69.2%
Girls Athletic Leadership School - High School			
Classroom content relates to things in my life.	52.9%	56.5%	19.5%
I use resources in my classroom to help me answer questions or complete assignments.	59.7%	75.8%	46.3%
When learning something new, my teacher gives me time to practice the concepts and skills.	25.0%	27.4%	68.3%
Girls Athletic Leadership School - Middle School			
Classroom content relates to things in my life.	45.3%	n/a	21.4%
I use resources in my classroom to help me answer questions or complete assignments.	67.8%	n/a	44.2%
When learning something new, my teacher gives me time to practice the concepts and skills.	27.0%	n/a	69.2%
Global Village Academy			
Classroom content relates to things in my life.	52.9%	53.2%	27.4%
I use resources in my classroom to help me answer questions or complete assignments.	65.5%	62.4%	55.4%
When learning something new, my teacher gives me time to practice the concepts and skills.	33.9%	25.3%	64.1%
New Legacy Charter School			
Classroom content relates to things in my life.	42.9%	54.5%	34.8%

I use resources in my classroom to help me answer questions or complete assignments.	63.6%	77.3%	47.8%
When learning something new, my teacher gives me time to practice the concepts and skills.	17.9%	31.8%	78.3%
Pagosa Peak Open School			
Classroom content relates to things in my life.	43.6%	41.3%	25.0%
I use resources in my classroom to help me answer questions or complete assignments.	60.3%	60.9%	30.0%
When learning something new, my teacher gives me time to practice the concepts and skills.	33.3%	27.2%	58.0%
Steamboat Montessori			
Classroom content relates to things in my life.	50.0%	53.8%	30.5%
I use resources in my classroom to help me answer questions or complete assignments.	82.1%	79.1%	52.4%
When learning something new, my teacher gives me time to practice the concepts and skills.	41.3%	38.8%	67.5%

Appendix F: SEA Responses by Diverse Learner Groups

Table 1: Percent of students identified as English Language Learners with high engagement for each SEA question in each administration

	SY21 Spring	SY22 Fall	SY22 Winter	SY22 Spring
Behavioral				
I get to ask questions.	--	60.7%	62.6%	--
I have the chance to take breaks.	41.5%	43.4%	43.8%	48.0%
I make eye contact with my teacher.	--	55.6%	46.1%	47.8%
I nod my head to show I'm paying attention.	--	55.7%	54.8%	58.4%
I raise my hand to show I'm paying attention.	--	56.1%	51.0%	47.2%
I sit quietly to show I'm paying attention.	--	65.5%	66.9%	62.0%
I smile or laugh at school.	--	51.8%	33.0%	36.0%
I turn in my homework.	--	68.1%	65.8%	66.5%
My teacher can tell if I am paying attention.	70.1%	--	--	--
Whole group classroom discussions are interesting.	47.7%	46.7%	40.0%	46.1%
Cognitive				
Classroom activities are interesting.	51.0%	54.8%	46.7%	48.0%
I ask questions in class.	--	53.2%	46.2%	41.2%
I can make choices about my work and learning.	46.1%	57.3%	54.5%	57.5%
I complete the activities in class.	--	66.5%	71.2%	68.7%
I feel challenged by my classwork.	29.9%	35.5%	43.6%	48.2%
I get to ask questions.	68.9%	64.2%	56.6%	63.0%
I have the chance to share my thoughts in class.	--	41.2%	38.4%	39.6%
I share about my learning and thinking.	37.8%	38.1%	33.6%	35.9%
I talk with my classmates.	--	48.9%	55.3%	52.0%
It is hard for me to stop working on classroom activities.	12.9%	--	--	--
Emotional				
Adults at my school help me or care about how I am doing.	59.8%	73.5%	65.1%	70.6%
I believe I am a good student.	61.8%	73.7%	66.9%	69.2%
I can be myself at school.	66.0%	56.7%	52.3%	61.2%
I enjoy being in my classroom.	63.1%	63.5%	50.4%	56.7%
I feel accepted for who I am and where I come from.	66.8%	75.3%	62.0%	64.3%
I feel comfortable sharing my thoughts in class.	43.6%	41.1%	29.0%	30.1%
I feel safe at school.	74.7%	69.4%	67.7%	67.8%
I get along with my classmates.	68.9%	67.0%	58.4%	61.3%
I get to work with my classmates.	48.5%	59.5%	53.8%	56.3%
I want to be a good student.	--	87.6%	85.6%	85.4%
My teacher is happy to have me in their classroom.	71.8%	77.1%	74.0%	76.6%

Table 2: Percent of students qualifying for Free or Reduced-Price Lunch with high engagement for each SEA question in each administration

	SY21 Spring	SY22 Fall	SY22 Winter	SY22 Spring
Behavioral				
I get to ask questions.	--	73.0%	71.1%	--
I have the chance to take breaks.	45.0%	35.7%	37.7%	40.7%
I make eye contact with my teacher.	--	55.9%	47.6%	48.6%
I nod my head to show I'm paying attention.	--	57.7%	54.6%	62.3%
I raise my hand to show I'm paying attention.	--	63.7%	49.1%	50.4%
I sit quietly to show I'm paying attention.	--	69.9%	65.1%	67.5%
I smile or laugh at school.	--	51.6%	38.1%	43.9%
I turn in my homework.	--	78.3%	73.0%	69.8%
My teacher can tell if I am paying attention.	75.6%	--	--	--
Whole group classroom discussions are interesting.	57.3%	59.2%	49.6%	54.0%
Cognitive				
Classroom activities are interesting.	46.6%	55.2%	49.6%	45.7%
I ask questions in class.	--	54.3%	46.2%	42.4%
I can make choices about my work and learning.	45.8%	66.7%	56.6%	60.3%
I complete the activities in class.	--	69.4%	81.4%	75.9%
I feel challenged by my classwork.	22.1%	32.5%	41.8%	43.1%
I get to ask questions.	64.9%	63.9%	52.7%	67.2%
I have the chance to share my thoughts in class.	--	40.7%	38.9%	38.9%
I share about my learning and thinking.	41.2%	43.0%	42.1%	38.7%
I talk with my classmates.	--	52.7%	56.0%	51.7%
It is hard for me to stop working on classroom activities.	16.0%	--	--	--
Emotional				
Adults at my school help me or care about how I am doing.	49.6%	72.1%	65.8%	68.8%
I believe I am a good student.	61.8%	74.5%	63.0%	72.4%
I can be myself at school.	58.8%	56.4%	54.5%	57.1%
I enjoy being in my classroom.	60.3%	59.4%	51.5%	50.6%
I feel accepted for who I am and where I come from.	66.4%	76.4%	64.5%	64.5%
I feel comfortable sharing my thoughts in class.	42.7%	41.4%	32.0%	40.9%
I feel safe at school.	67.9%	71.3%	68.2%	65.3%
I get along with my classmates.	70.2%	68.8%	65.5%	64.6%
I get to work with my classmates.	51.1%	50.6%	41.8%	47.9%
I want to be a good student.	--	91.2%	93.2%	90.6%
My teacher is happy to have me in their classroom.	69.5%	74.8%	77.0%	77.2%

Table 3: Percent of students who have an IEP or 504 Plan with high engagement for each SEA question in each administration

	SY21 Spring	SY22 Fall	SY22 Winter	SY22 Spring
Behavioral				
I get to ask questions.	--	70.6%	69.9%	--
I have the chance to take breaks.	36.9%	49.0%	56.8%	46.4%
I make eye contact with my teacher.	--	56.8%	54.5%	51.4%
I nod my head to show I'm paying attention.	--	55.0%	45.2%	52.6%
I raise my hand to show I'm paying attention.	--	55.8%	51.1%	51.4%
I sit quietly to show I'm paying attention.	--	61.6%	67.6%	64.0%
I smile or laugh at school.	--	50.0%	35.7%	28.4%
I turn in my homework.	--	70.5%	70.4%	72.0%
My teacher can tell if I am paying attention.	67.8%	--	--	--
Whole group classroom discussions are interesting.	41.2%	48.5%	46.4%	43.9%
Cognitive				
Classroom activities are interesting.	45.9%	56.8%	48.9%	44.6%
I ask questions in class.	--	49.2%	40.5%	41.7%
I can make choices about my work and learning.	50.6%	60.1%	58.0%	58.6%
I complete the activities in class.	--	65.1%	71.1%	72.2%
I feel challenged by my classwork.	44.2%	41.9%	41.7%	48.7%
I get to ask questions.	70.4%	53.3%	55.9%	64.4%
I have the chance to share my thoughts in class.	--	47.8%	33.7%	49.5%
I share about my learning and thinking.	44.6%	47.4%	36.9%	32.0%
I talk with my classmates.	--	54.0%	55.3%	49.5%
It is hard for me to stop working on classroom activities.	16.3%	--	--	--
Emotional				
Adults at my school help me or care about how I am doing.	68.7%	71.1%	72.9%	77.5%
I believe I am a good student.	66.5%	72.2%	68.8%	66.5%
I can be myself at school.	63.9%	55.3%	52.4%	51.5%
I enjoy being in my classroom.	58.4%	58.5%	60.2%	48.6%
I feel accepted for who I am and where I come from.	70.4%	73.4%	65.4%	60.1%
I feel comfortable sharing my thoughts in class.	45.9%	36.8%	31.0%	23.7%
I feel safe at school.	78.5%	72.7%	70.9%	71.0%
I get along with my classmates.	69.1%	64.9%	66.0%	62.4%
I get to work with my classmates.	50.2%	58.0%	48.2%	42.9%
I want to be a good student.	--	88.5%	86.1%	86.6%
My teacher is happy to have me in their classroom.	72.5%	78.8%	78.7%	78.5%

Table 4: Percent of students identified as Gifted and Talented with high engagement for each SEA question in each administration

	SY21 Spring	SY22 Fall	SY22 Winter	SY22 Spring
Behavioral				
I get to ask questions.	--	88.5%	83.8%	--
I have the chance to take breaks.	31.5%	46.6%	43.8%	46.6%
I make eye contact with my teacher.	--	62.5%	55.2%	52.2%
I nod my head to show I'm paying attention.	--	52.4%	51.3%	49.4%
I raise my hand to show I'm paying attention.	--	50.0%	50.9%	46.1%
I sit quietly to show I'm paying attention.	--	67.2%	69.8%	66.1%
I smile or laugh at school.	--	53.1%	48.8%	39.1%
I turn in my homework.	--	90.6%	85.7%	85.5%
My teacher can tell if I am paying attention.	79.0%	--	--	--
Whole group classroom discussions are interesting.	54.1%	63.1%	54.4%	65.5%
Cognitive				
Classroom activities are interesting.	45.5%	51.2%	43.4%	36.6%
I ask questions in class.	--	54.7%	50.0%	44.3%
I can make choices about my work and learning.	49.7%	56.9%	55.2%	51.8%
I complete the activities in class.	--	92.2%	95.0%	89.7%
I feel challenged by my classwork.	40.4%	31.5%	24.5%	33.0%
I get to ask questions.	80.9%	56.5%	73.1%	80.9%
I have the chance to share my thoughts in class.	--	43.5%	42.3%	48.1%
I share about my learning and thinking.	58.9%	46.8%	51.3%	48.9%
I talk with my classmates.	--	55.1%	55.7%	50.4%
It is hard for me to stop working on classroom activities.	17.5%	--	--	--
Emotional				
Adults at my school help me or care about how I am doing.	64.8%	74.2%	70.8%	66.7%
I believe I am a good student.	85.7%	89.1%	86.8%	82.1%
I can be myself at school.	66.2%	69.2%	71.4%	65.9%
I enjoy being in my classroom.	61.1%	57.8%	52.8%	55.3%
I feel accepted for who I am and where I come from.	79.6%	84.0%	78.1%	73.9%
I feel comfortable sharing my thoughts in class.	59.7%	54.3%	64.1%	62.1%
I feel safe at school.	88.5%	82.8%	85.8%	82.6%
I get along with my classmates.	81.8%	83.5%	84.8%	84.2%
I get to work with my classmates.	49.0%	39.7%	38.0%	39.1%
I want to be a good student.	--	90.6%	89.6%	84.3%
My teacher is happy to have me in their classroom.	82.2%	80.2%	85.7%	79.8%

Table 5: Comparison of cohort averages from SY21 to SY22 for each diverse learner group

	Behavioral		Cognitive		Emotional	
	2021	2022	2021	2022	2021	2022
Students not identified as English Learners	62.2%	64.5%	53.6%	58.2%	73.7%	72.6%
Students identified as English Learners	45.8%	54.7%	37.0%	48.4%	54.1%	65.2%
Gap between groups	16.4%	9.7%	16.7%	9.8%	19.7%	7.4%
Students not qualified for Free or Reduced-Price Lunch	57.3%	57.6%	49.9%	55.0%	68.5%	69.1%
Students qualified for Free or Reduced-Price Lunch	44.5%	61.6%	28.5%	54.1%	43.8%	73.3%
Gap between groups	12.8%	4.1%	21.4%	0.9%	24.8%	4.2%
Students who do not have an IEP or 504 Plan	63.1%	59.7%	52.9%	56.3%	71.6%	71.3%
Students who have an IEP or 504 Plan	36.4%	56.8%	31.3%	52.1%	52.6%	66.0%
Gap between groups	26.8%	2.9%	21.6%	4.2%	19.0%	5.2%
Students not identified as Gifted and Talented	60.3%	58.9%	51.7%	54.7%	70.4%	69.8%
Students identified as Gifted and Talented	61.4%	56.4%	52.9%	49.3%	68.7%	66.4%
Gap between groups	1.1%	2.5%	1.2%	5.4%	1.7%	3.3%

Appendix G: State Academic Data

Table 1: English Language Arts – For gender groups, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
Female			
Cohort School	69.4%	60.5%	-8.9%
Not in Cohort	55.6%	51.6%	-4.1%
Male			
Cohort School	59.7%	54.8%	-4.9%
Not in Cohort	48.3%	43.4%	-4.9%

Table 2: Mathematics – For gender groups, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
Female			
Cohort School	37.1%	35.2%	-1.9%
Not in Cohort	34.9%	35.1%	0.2%
Male			
Cohort School	48.0%	42.5%	-5.5%
Not in Cohort	38.7%	39.7%	1.0%

Table 3: English Language Arts – For Free or Reduced-Price Lunch eligible group, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
Free/Reduced Lunch Eligible			
Cohort School	43.0%	34.3%	-8.7%
Not in Cohort	37.0%	31.5%	-5.5%
Not Free/Reduced Lunch Eligible			
Cohort School	52.7%	55.0%	2.2%
Not in Cohort	56.7%	49.7%	-7.0%

Table 4: Mathematics – For Free or Reduced-Price Lunch eligible group, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
Free/Reduced Lunch Eligible			
Cohort School	23.2%	26.2%	3.0%
Not in Cohort	20.4%	20.8%	0.4%
Not Free/Reduced Lunch Eligible			
Cohort School	31.3%	47.9%	16.6%
Not in Cohort	38.1%	37.7%	-0.4%

Table 5: English Language Arts – For English Learner group, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
English Language Learners			
Cohort School	n/a	20.4%	n/a
Not in Cohort	18.6%	16.3%	-2.3%
Not English Language Learners			
Cohort School	70.7%	66.8%	-3.9%
Not in Cohort	55.1%	50.1%	-5.0%

Table 6: Mathematics – For English Learner group, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
English Language Learners			
Cohort School	n/a	8.6%	n/a
Not in Cohort	15.6%	15.9%	0.3%
Not English Language Learners			
Cohort School	41.1%	44.3%	3.3%
Not in Cohort	36.7%	37.0%	0.3%

Table 7: English Language Arts – For Gifted and Talented group, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
Gifted and Talented			
Cohort School	100.0%	95.2%	-4.8%
Not in Cohort	94.5%	91.7%	-2.8%
Not Gifted and Talented			
Cohort School	51.4%	53.1%	1.7%
Not in Cohort	48.2%	46.6%	-1.6%

Table 8: Mathematics – For Gifted and Talented group, comparison of percent of students meeting or exceeding expectations for cohort and non-cohort schools from SY21 to SY22

	SY21	SY22	Change SY21 to SY22
Gifted and Talented			
Cohort School	94.7%	92.5%	-2.2%
Not in Cohort	85.8%	85.8%	0.0%
Not Gifted and Talented			
Cohort School	32.3%	40.1%	7.8%
Not in Cohort	31.6%	33.7%	2.1%

Appendix H: MMS Responses

Table 1: By school role, comparison of SY21 and SY22 responses to "To what extent do you think the following student groups are generally engaged in your class/school?"

	Rarely Engaged		Occasionally Engaged		TOTAL: Frequently or Nearly Always Engaged			N/A or Not Sure	
	2021	2022	2021	2022	2021	2022	Change	2021	2022
Classroom Teacher									
Students Overall	0.3%	0.0%	5.6%	1.4%	**58.9%**	**33.9%**	-25.0%	0.0%	0.0%
English Language Learners	0.3%	0.3%	13.6%	4.2%	**39.4%**	**25.0%**	-14.4%	11.4%	5.8%
Students identified as Gifted and Talented	0.6%	0.0%	3.6%	0.8%	**46.4%**	**28.3%**	-18.1%	14.2%	6.1%
Students qualifying for Free or Reduced-Price Lunch	0.6%	0.0%	6.4%	2.5%	**40.3%**	**22.8%**	-17.5%	17.5%	10.0%
Students with an IEP or 504 Plan	1.9%	0.0%	17.2%	6.9%	**40.3%**	**26.4%**	-13.9%	5.3%	1.9%
School Administrator									
Students Overall	0.0%	0.0%	11.9%	1.7%	**52.5%**	**32.2%**	-20.3%	0.0%	1.7%
English Language Learners	3.4%	0.0%	18.6%	3.4%	**35.6%**	**30.5%**	-5.1%	6.8%	1.7%
Students identified as Gifted and Talented	1.7%	0.0%	13.6%	6.8%	**42.4%**	**25.4%**	-16.9%	6.8%	3.4%
Students qualifying for Free or Reduced-Price Lunch	1.7%	0.0%	18.6%	5.1%	**37.3%**	**28.8%**	-8.5%	6.8%	1.7%
Students with an IEP or 504 Plan	0.0%	0.0%	23.7%	11.9%	**35.6%**	**22.0%**	-13.6%	5.1%	1.7%
Support Staff									
Students Overall	1.5%	0.0%	12.5%	2.9%	**55.9%**	**27.2%**	-28.7%	0.0%	0.0%
English Language Learners	5.1%	0.7%	14.7%	4.4%	**33.8%**	**18.4%**	-15.4%	16.2%	6.6%
Students identified as Gifted and Talented	1.5%	0.0%	5.1%	2.9%	**34.6%**	**15.4%**	-19.1%	28.7%	11.8%
Students qualifying for Free or Reduced-Price Lunch	2.2%	0.0%	12.5%	3.7%	**31.6%**	**14.0%**	-17.6%	23.5%	12.5%
Students with an IEP or 504 Plan	5.1%	0.0%	23.5%	8.8%	**37.5%**	**21.3%**	-16.2%	3.7%	0.0%

Table 2: Comparison of percent of classroom teachers and school administrators who responded "Frequently" or "Nearly Always Engaged" to "To what extent do you think the following student groups are generally engaged in your class/school?"

	SY21			SY22		
	Classroom Teacher	School Admin.	*Difference*	Classroom Teacher	School Admin.	*Difference*
Students Overall	58.9%	52.5%	*6.3%*	33.9%	32.2%	*1.7%*
English Language Learners	39.4%	35.6%	*3.9%*	25.0%	30.5%	*-5.5%*
Students identified as Gifted and Talented	46.4%	42.4%	*4.0%*	28.3%	25.4%	*2.9%*
Students qualifying for Free or Reduced-Price Lunch	40.3%	37.3%	*3.0%*	22.8%	28.8%	*-6.0%*
Students with an IEP or 504 Plan	40.3%	35.6%	*4.7%*	26.4%	22.0%	*4.4%*
Average Difference			*4.4%*			*4.1%*

Table 3: Comparison of SY21 and SY22 classroom teacher responses to "To what degree do you think the following factors influence your students' level of engagement?"

	Not at All	Very Little	Somewhat	A Lot	TOTAL: Somewhat and A Lot	Change SY21 to SY22	N/A or Not Used
Curriculum that is reflective of students and who they are						6.1%	
2021 Spring	3.9%	8.6%	33.0%	41.2%	74.2%		13.3%
2022 Spring	3.9%	8.7%	39.4%	40.9%	80.3%		7.1%
Peers give feedback on student work						5.2%	
2021 Spring	2.1%	21.0%	39.1%	21.9%	60.9%		15.9%
2022 Spring	3.1%	22.8%	41.7%	24.4%	66.1%		7.9%
Projects or assignments are based on student input						6.9%	
2021 Spring	2.6%	5.2%	32.2%	45.9%	78.1%		14.2%
2022 Spring	0.8%	11.0%	37.8%	47.2%	85.0%		3.1%
Requiring students' written or verbal participation						1.5%	
2021 Spring	0.9%	5.2%	41.6%	49.8%	91.4%		2.6%
2022 Spring	0.8%	4.7%	33.9%	59.1%	92.9%		1.6%
Students feel the content matters to their lives						0.9%	
2021 Spring	0.9%	4.7%	41.2%	47.6%	88.8%		5.6%
2022 Spring	0.8%	7.1%	47.2%	42.5%	89.8%		2.4%
Students have choices about their work						5.3%	
2021 Spring	2.1%	8.6%	32.2%	46.8%	79.0%		10.3%
2022 Spring	1.6%	9.4%	32.3%	52.0%	84.3%		4.7%
Teachers give feedback on student work						8.9%	
2021 Spring	0.9%	8.6%	41.6%	46.4%	88.0%		2.6%
2022 Spring	0.8%	2.4%	33.9%	63.0%	96.9%		0.0%
Time during class for students to share their thoughts and opinions						4.2%	
2021 Spring	1.3%	4.7%	26.2%	65.7%	91.8%		2.1%
2022 Spring	0.8%	3.1%	29.1%	66.9%	96.1%		0.0%

Table 4: Comparison of SY21 and SY22 classroom teacher responses to "When determining your students' level of engagement, how useful are the following in-class indicators to you?"

	Not at all Useful	Somewhat Useful	Very Useful	Extremely Useful	TOTAL: Very and Extremely Useful	Change SY21 to SY22	N/A or Not Sure
"Quiet bodies"						**3.8%**	
2021 Spring	13.7%	36.5%	24.0%	10.7%	34.8%		15.0%
2022 Spring	9.4%	45.7%	26.8%	11.8%	38.6%		6.3%
Complete-ness of student work						**-2.4%**	
2021 Spring	1.7%	25.3%	44.6%	27.0%	71.7%		1.3%
2022 Spring	0.8%	29.9%	45.7%	23.6%	69.3%		0.0%
Frequency of participation						**0.2%**	
2021 Spring	0.4%	6.0%	44.2%	48.5%	92.7%		0.9%
2022 Spring	0.0%	7.1%	41.7%	51.2%	92.9%		0.0%
Hand raising						**5.8%**	
2021 Spring	5.6%	33.0%	40.3%	18.5%	58.8%		2.6%
2022 Spring	3.1%	31.5%	36.2%	28.3%	64.6%		0.8%
Rule following						**1.8%**	
2021 Spring	9.9%	36.5%	36.5%	13.7%	50.2%		3.4%
2022 Spring	3.1%	44.1%	33.1%	18.9%	52.0%		0.8%
Students' facial expressions						**6.6%**	
2021 Spring	3.4%	17.6%	42.5%	35.2%	77.7%		1.3%
2022 Spring	1.6%	13.4%	50.4%	33.9%	84.3%		0.8%
Students' persistence in difficult tasks						**9.2%**	
2021 Spring	1.3%	13.7%	33.5%	51.1%	84.5%		0.4%
2022 Spring	0.0%	5.5%	41.7%	52.0%	93.7%		0.8%
Students speaking in turn						**6.2%**	
2021 Spring	11.2%	28.8%	32.2%	26.2%	58.4%		1.7%
2022 Spring	3.9%	29.9%	38.6%	26.0%	64.6%		1.6%

Table 5: Comparison of SY21 and SY22 classroom teacher responses to "To what extent do you agree with each statement about the skills and support you have in engaging your students?"

	Strongly disagree	Disagree	Agree	Strongly agree	TOTAL: Agree and Strongly Agree	Change SY21 to SY22	N/A or Not Sure
I am able to ensure my students feel challenged but not overwhelmed by their work.						**2.1%**	
2021 Spring	0.4%	3.0%	66.5%	27.5%	94.0%		2.6%
2022 Spring	0.0%	2.4%	68.5%	27.6%	96.1%		1.6%
I have the skills I need to effectively engage students who are English Language Learners.						**8.4%**	
2021 Spring	2.6%	13.7%	53.6%	16.7%	70.4%		13.3%
2022 Spring	1.6%	12.6%	52.8%	26.0%	78.7%		7.1%
I have the skills I need to effectively engage students who are identified as Gifted and Talented.						**15.7%**	
2021 Spring	2.1%	10.7%	45.5%	26.2%	71.7%		15.5%
2022 Spring	0.0%	4.7%	56.7%	30.7%	87.4%		7.9%
I have the skills I need to effectively engage students who have an IEP or 504 Plan.						**12.9%**	
2021 Spring	3.0%	14.6%	59.7%	17.2%	76.8%		5.6%
2022 Spring	0.0%	7.9%	68.5%	21.3%	89.8%		2.4%
I have the skills I need to effectively engage students who qualify for Free or Reduced-Price Lunch.						**5.4%**	
2021 Spring	1.7%	3.0%	48.1%	24.5%	72.5%		22.7%
2022 Spring	0.0%	3.9%	50.4%	27.6%	78.0%		18.1%
I have the skills I need to help my students feel valued for their personal identities.						**8.0%**	
2021 Spring	1.3%	7.7%	53.2%	30.9%	84.1%		6.9%
2022 Spring	0.0%	3.9%	54.3%	37.8%	92.1%		3.9%
There are daily opportunities in my class for students to ask questions.						**-0.8%**	
2021 Spring	0.0%	0.0%	26.6%	73.4%	100.0%		0.0%
2022 Spring	0.8%	0.0%	29.1%	70.1%	99.2%		0.0%
There are daily opportunities in my class for students to share about their personal identities.						**8.1%**	
2021 Spring	1.7%	14.6%	43.3%	34.3%	77.7%		6.0%
2022 Spring	3.9%	7.9%	46.5%	39.4%	85.8%		2.4%

Table 6: By intervention strategy, all responses to "To what extent do you agree that student engagement was a major focus at your school during the 21-22 school year."

	Disagree	Somewhat disagree	Somewhat agree	Agree	N/A or Not Sure
Cooperative Learning	0.0%	0.0%	7.1%	92.9%	0.0%
Increasing the Cognitive Lift	2.6%	4.4%	35.1%	54.4%	3.5%
LETRS	0.0%	5.9%	23.5%	64.7%	5.9%
Universal Design for Learning	0.0%	4.5%	9.1%	84.1%	2.3%

Table 7: All responses to "How familiar are you with your school's selected IDLEA intervention strategy?"

	Not at all familiar	Slightly familiar	Somewhat familiar	Very familiar	TOTAL: Somewhat or Very Familiar	N/A or Not Sure
Cooperative Learning	7.1%	0.0%	14.3%	78.6%	92.9%	0.0%
Increasing the Cognitive Lift	12.3%	14.9%	36.0%	21.1%	57.0%	15.8%
LETRS	11.8%	5.9%	11.8%	17.6%	29.4%	52.9%
Universal Design for Learning	15.9%	6.8%	31.8%	29.5%	61.4%	15.9%

Table 8: All responses to MMS questions about frequency of project topics in staff meetings.

	Never	Rarely	Occasionally	Frequently	N/A or Not Sure
How often was student engagement a topic at staff meetings in SY22?	0.5%	6.3%	39.2%	49.2%	4.8%
How often was the IDLEA/RISE project specifically a topic at staff meetings in SY22?	3.2%	10.1%	44.7%	26.6%	15.4%

Table 9: By intervention strategy, all responses to "How effective was the selected intervention in increasing student engagement for the following students?"

	Not at all effective	Slightly effective	Moderately effective	Very effective	TOTAL: Moderately and Very Effective	N/A or Not Sure
Cooperative Learning						
Students overall	0.0%	0.0%	50.0%	50.0%	**100.0%**	0.0%
English Language Learners	0.0%	0.0%	57.1%	42.9%	**100.0%**	0.0%
Students identified as Gifted and Talented	0.0%	7.1%	50.0%	28.6%	**78.6%**	14.3%
Students qualified for Free or Reduced-Priced Lunch	0.0%	0.0%	64.3%	28.6%	**92.9%**	7.1%
Students with an IEP or 504 Plan	0.0%	0.0%	71.4%	28.6%	**100.0%**	0.0%
Increasing the Cognitive Lift						
Students overall	1.8%	6.1%	51.8%	14.0%	**65.8%**	26.3%
English Language Learners	1.8%	7.9%	40.4%	12.3%	**52.6%**	37.7%
Students identified as Gifted and Talented	1.8%	9.6%	34.2%	14.0%	**48.2%**	40.4%
Students qualified for Free or Reduced-Priced Lunch	1.8%	7.0%	42.1%	9.6%	**51.8%**	39.5%
Students with an IEP or 504 Plan	0.0%	12.3%	42.1%	14.9%	**57.0%**	30.7%
LETRS						
Students overall	0.0%	0.0%	11.8%	23.5%	**35.3%**	64.7%
English Language Learners	0.0%	0.0%	11.8%	23.5%	**35.3%**	64.7%
Students identified as Gifted and Talented	0.0%	0.0%	11.8%	11.8%	**23.5%**	76.5%
Students qualified for Free or Reduced-Priced Lunch	0.0%	0.0%	11.8%	17.6%	**29.4%**	70.6%
Students with an IEP or 504 Plan	0.0%	0.0%	11.8%	23.5%	**35.3%**	64.7%
Universal Design for Learning						
Students overall	4.5%	4.5%	43.2%	18.2%	**61.4%**	29.5%
English Language Learners	2.3%	9.1%	31.8%	13.6%	**45.5%**	43.2%
Students identified as Gifted and Talented	2.3%	9.1%	25.0%	15.9%	**40.9%**	47.7%
Students qualified for Free or Reduced-Priced Lunch	2.3%	6.8%	25.0%	11.4%	**36.4%**	54.5%
Students with an IEP or 504 Plan	2.3%	9.1%	36.4%	18.2%	**54.5%**	34.1%

Table 10: By intervention strategy, all responses to "How many times did you review the IDLEA/RISE Student Engagement Assessment (SEA) results in each setting?"

	Never	One time	A couple of times	Multiple times	TOTAL: At least one time	N/A or Not Sure
Cooperative Learning						
On your own	18.2%	18.2%	45.5%	9.1%	**72.7%**	9.1%
One-on-one with a supervisor	36.4%	18.2%	27.3%	9.1%	**54.5%**	9.1%
With a faculty team	0.0%	36.4%	27.3%	36.4%	**100.0%**	0.0%
With students	63.6%	0.0%	27.3%	0.0%	**27.3%**	9.1%
Increasing the Cognitive Lift						
On your own	15.4%	34.6%	23.1%	26.9%	**84.6%**	0.0%
One-on-one with a supervisor	30.8%	30.8%	26.9%	3.8%	**61.5%**	7.7%
With a faculty team	7.7%	15.4%	57.7%	19.2%	**92.3%**	0.0%
With students	65.4%	11.5%	7.7%	7.7%	**26.9%**	7.7%
Universal Design for Learning						
On your own	45.5%	0.0%	18.2%	27.3%	**45.5%**	9.1%
One-on-one with a supervisor	54.5%	9.1%	9.1%	0.0%	**18.2%**	27.3%
With a faculty team	0.0%	27.3%	63.6%	9.1%	**100.0%**	0.0%
With students	81.8%	9.1%	0.0%	0.0%	**9.1%**	9.1%

There was an insufficient number of responses to include information for LETRS

Appendix I: List of RISE Cohort Schools

Academy 360
Animas High School
Carbondale Community
Global Village Academy
Girls Athletic Leadership School, High School (GALS)
Girls Athletic Leadership School, Middle School (GALS)
McAuliffe International School – *Left the cohort after Spring SY21*
New Legacy Charter School
Pagosa Peak Open School
REACH Charter School
Rocky Mountain Classical Academy
Steamboat Montessori, formerly Mountain Village Montessori Charter School
STRIVE Prep Montbello
Thomas MacLaren School