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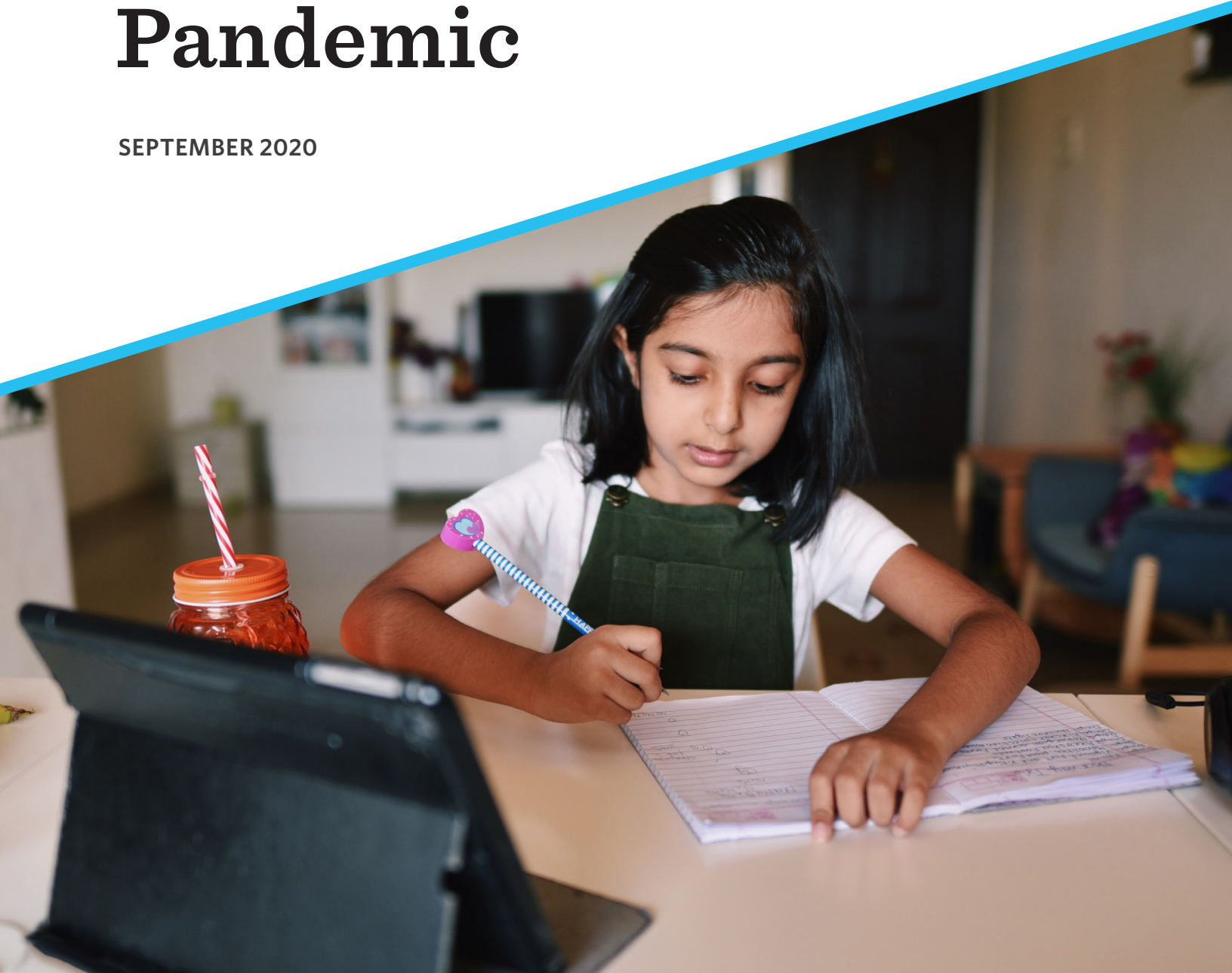
Recommendations on

Starting School During the COVID-19 Pandemic

SEPTEMBER 2020

THE AIM OF THIS REPORT

This report is intended to complement a number of outstanding existing reports compiled by respected government, university, and association sources on how children can return safely to school during the coronavirus pandemic. Eight psychologists who specialize in studying and working with children and youth from pre-K to 12th grade reviewed those reports and contributed to this document with the following goals in mind:

1. **To identify areas essential to effective schooling, including virtual learning, that are *not* emphasized in the other reports.**

2. **To provide practical, evidence-based steps shown by psychological research to enhance student learning and well-being, whether in person or online.**

3. **To offer suggestions to parents, and administrators of school-age children on how to implement these steps. The examples target the general student population and can be modified to address age differences as needed.**

While the public often associates psychology with efforts to address mental health concerns, this paper focuses specifically on additional domains of psychology: what psychological science says about learning, child development, motivation, assessment, and behavior change in the classroom context. Applying psychology to classroom learning has a rich history of leadership starting with the first president of APA, G. Stanley Hall, a renowned specialist in child development as well as the work of renowned Swiss educational psychologist Jean Piaget in the 20th century and continuing to the present.

The report provides recommendations in the following areas as they pertain to starting school during this challenging time: motivation, behavior support, learning and instruction, well-being and assessment. It also addresses relevant topics related to social justice and equity.

Promoting Learning

Loss of learning on a standard timeline is of serious concern for teachers, students and parents alike during the COVID-19 pandemic. Psychological learning principles can be used to help keep students on track regardless of circumstances.

The science of learning and instruction says that:

Self-regulation can facilitate learning, and self-regulatory skills can be taught.

Ways to foster self-regulation:

- **Prepare a space as free of distraction** as possible.
- **Praise on-task behavior,** but also encourage students to take breaks between periods of work.
- **Give students choices** in areas that they can control and include them in decisions about their own behavior. This promotes self-regulation more effectively than simply giving commands.
- **Break larger tasks into smaller "bite-size" pieces**. Clearly describe what successful task completion looks like while keeping in mind the specific requirements of the task.
- **Use technology to demonstrate self-regulatory strategies.** Show on Zoom how kids can take periodic pauses while reading and then summarize what they understand.
- **Teach awareness practices.** Help children develop executive function skills such as planning, organizing, and setting reasonable goals, by teaching practices that reduce anxiety and promote self-awareness. These include stress reducers such as deep breathing or listening to a story.

Students' beliefs or perceptions about intelligence and ability affect their cognitive functioning and learning.

Ways to encourage positive beliefs about the self and one's abilities:

- **Help children and youth view challenges as opportunities** to learn and not as a sign that they are not able. If students believe that their abilities are fixed and then they fail, they will extend that logic to think there's nothing they can do to change. In the same vein, if they are successful, they may avoid situations that threaten their self-image as being smart or a "natural."

- Similarly, convey to students that **they can always improve their performance** by making greater effort and/or employing different strategies. When students believe they have the power to improve their performance, they are tapping into a growth mindset that underscores the importance of motivation and persistence in successfully tackling challenging problems or material.

Clear, explanatory, and timely feedback to students is important for learning.

Ways to do provide helpful feedback:

- **Help students plan their approach** to an assignment or project by asking them to identify and evaluate the immediate and long-term consequences of their decisions. In a creative writing assignment, for instance, break the task down into the components of the story, such as the title, setting, list of characters or ending. If you start with the setting, discuss three or four alternative choices, ask the student to discuss why one alternative might be better than another, and then have them choose which one they will pursue.
- **Provide feedback about specific aspects** of a student's performance, and give them opportunities to use that feedback to revise their work.

Acquiring long-term knowledge and skill depends largely on practice.

Ways to foster good practice habits:

- **Give students the time and opportunity** to practice new information so they can remember it over time. They should be able to explain the information in their own words, ask questions about it, rehearse it and practice it repeatedly. Explain that the point of practice is to make a skill or knowledge automatic, and that automatic access allows you to do more interesting tasks.

- **Use reviews and practice tests** to enhance memory and mastery. The value of these practices increases when you conduct them frequently and at regular intervals, rather than cramming. Brief tests with open-ended questions are particularly effective because they require students to retrieve information from long-term memory *and* generate new information from that retrieval.

- **Provide students with opportunities** to practice retrieving and encoding information. For instance, the practice of stopping a video at a designated point and having students write down the main points increases their ability to use that information later. Or, have students make up a quiz about the information that they learned that day, and have them prepare a "lesson" to teach you about the information.

Learning is based on context, so teachers must facilitate students' ability to generalize learning to new contexts.

Children do not automatically transfer or generalize their knowledge from one context or situation to new contexts or situations. In fact, the more dissimilar the new context is from the original learning context, the more difficulty they will have applying that knowledge or skill to other situations. Teachers can help children generalize and apply their knowledge by regularly providing real-life instances of the academic behaviors in which they are engaged.

Ways to help kids effectively generalize knowledge:

- **Encourage the transfer of skills and knowledge** by using them in different contexts. An example is asking students how they'd apply their knowledge of the American system of measurement to a visit to Canada, where the metric system is used. What skills from their current knowledge could help them best make this real-life transfer to the metric system?

- **Identify and build on strengths** that students bring to a learning situation, thereby making connections between students' current knowledge and the teachers' learning goals. Are there children in the class who have grown up in another country or whose parents
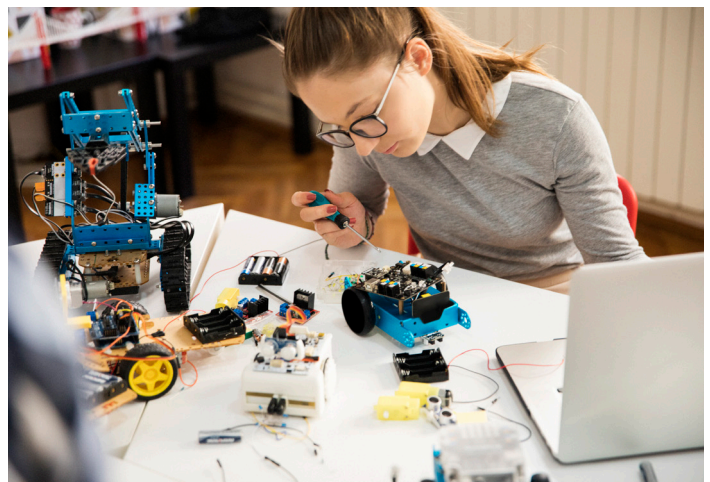
came from a country where they learned the metric system first? If so, encourage them to talk about how they transferred their understanding of measurement to the American system.

Student creativity can be fostered.

Ways to nudge creativity:

- **Allow students to use a variety of approaches** for completing tasks and solving problems. The strategies they have been taught may not be the only or best ways to answer a specific question or solve a particular problem.

- **Vary activities** by changing the wording of directions for assignments. Use words such as "create," "invent," discover," "imagine if," and "predict."

- **Create opportunities for play.** Games and creative play can stimulate useful self-regulatory skills. There are plenty of board games that incorporate planning, problem-solving, or hypothesis generation—think checkers, Othello or Candyland, to name a few. Or, try making music together. Sing, play duets, or make up songs or plays about staying home and perform them together as a family or class.

Brief tests with open-ended questions are particularly effective because they require students to retrieve information from long-term memory and generate new information from that retrieval.

Facilitating Motivation

Estimates from two recent surveys (Brown University/Annenberg Institute working paper; Educators for Excellence survey) indicate that across the nation and across grades, approximately 60% of students are engaging with online learning. But there's a broad range in those estimates, from a high of 80% of youngsters doing it successfully, to a low of less than 20%, particularly in schools with a majority of low-income and underserved minority students.

How can teachers and parents help children maintain that engagement and more importantly, get more kids on board, particularly after a spring semester of technological ups and downs and a summer of unresolved decisions about school openings? Psychological science offers insights in both of these areas.

The science of motivation says that:

Students tend to enjoy learning and to do better when they are intrinsically, rather than extrinsically, motivated to achieve. Intrinsic motivation means engaging in an activity for its own sake and not for a reward or its potential usefulness.

Ways to foster intrinsic motivation, while noting that not everything we need to learn or do can be intrinsically interesting:

- **Allow children to choose** from an array of learning tasks and provide input into how that work should be completed.

- **Involve students in planning** timelines for completing learning tasks and give them the opportunity to monitor their own progress in meeting those timelines.

- **Provide meaningful and relevant explanations** for assignments and expectations so that students understand what they did well and where they need to put in more effort.

- **Make learning meaningful.** If students don't understand why they're learning something, or why it's important or useful, they can easily disengage from the material. Other ways to make material applicable to students' lives are to include material relevant to students' race, culture, and ethnicity.

It is easier for students to stay with challenging tasks and to deeply process information when they adopt mastery goals rather than performance goals. Gaining mastery is motivated by a desire to acquire new skills and improve one's level of competence, while a performance orientation is motivated by the desire to "look good" or to gain the teacher's approval.

Ways to facilitate mastery:

- **Encourage students to describe the progress** they have already made and the successes they have already achieved instead of comparing their performance to that of other students. This helps students focus on meeting increasingly challenging personal goals rather than competing with others.

- **Mine the power of mistakes.** James Joyce once noted that mistakes are "portals to discovery." Treat mistakes as opportunities for learning, as opposed to failures. Allow students to re-do work and to improve their grades if they resubmit their work.

Work goals that are short-term, specific, and moderately difficult are easier to achieve than goals that are larger and more abstract.

Ways to help kids meet goals:

- When a task is too hard, **break it into smaller steps** and tackle problems one step at a time.

- **Show students how to evaluate their own progress** toward completing each short-term goal.

- **Encourage students to reduce distractions** while doing their schoolwork. For example, unless you need cell phones for a lesson, have students place their phones in a basket on the teacher's desk or in a closet at home during the lesson.

- **Use technology in the service of learning,** for example to build in reminders to keep track of goals. Students can set timers on their phones to practice skills and content for a certain amount of time each day or use phone calendars to keep track of incremental goals toward a long-term project.

- Teach students to **break up necessary but uninteresting tasks** with mini-rewards that they pick and offer themselves.

Teachers' expectations about student abilities affect students' opportunities to learn, their motivation and their learning outcomes.

Ways to convey high expectations:

- **Communicate** that you expect *all* students to learn and grow.

- **Be open to students' ability to change and improve,** including those who have done poorly in the past. Conversely, sometimes students who tend to do well may suddenly flag in their performance due to changes at home. Hold high expectations for *all* students and ask them to tell you if they need more support for learning or advice on technology problems.

- **Give timely feedback** that is specific, credible, and genuine. Focus on constructive feedback, whether in the form of critique, or about what a student did right. Saying that something is "very creative," for example, doesn't help a student to be creative again as much as saying, "I like the way you came up with an unexpected end to that story."

- **Make sure that children with disabilities have sufficient assistive resources** to help them succeed.

- For administrators, **listen to and support teachers' concerns** about their own health and safety.

*Hold high expectations for **all** students and ask them to tell you if they need more support for learning or advice on technology problems.*

Employing Smart Behavioral Strategies

Behavior management is a crucial ingredient in any teaching or learning endeavor: Consider the negative effects of off-task behavior that distracts other students, or of bullying, whether in person or online. Most of the nine reports reviewed by psychologists did not address this important category of psychological science, except to express concern that supports should be made available for students with disabilities.

To fill this gap, the science of behavior about teaching and learning says that:

Expectations for conduct and social interaction are learned and can be taught using proven principles of behavior and effective instruction.

Ways to set those expectations:

- **Start out strong.** The first two weeks of school are considered a crucial time for teachers to establish rules, expectations, and consequences—the place where academic and social groundwork are laid. Rules and expectations can be taught at that time and later re-taught as needed.

- **Adopt time-tested psychological principles** of instruction and behavior to facilitate learning, including:

  - Presenting desired goals, tasks, or behaviors in a clear manner.

  - Using timely and specific feedback to facilitate practice.

  - Reinforcing desired behaviors through praise and acknowledgement.

  - Reinforcing desired behaviors or responses and ignoring inappropriate behaviors or responses when they are not overly disruptive.

  - Using correction and planned consequences to consistently teach and remind students of your expectations.

  - Scheduling frequent breaks from screen time to prevent loss of attention or physical discomfort.

Effective behavior management is based on three factors: a) setting and communicating high expectations; b) consistently nurturing positive relationships; and c) providing a high level of student support.

Ways to skillfully manage kids' behavior:

- **Create and maintain a safe and well-arranged physical environment** and a predictable schedule, both at home and in school. Rules that are clearly explained and consistently enforced contribute to a safe and orderly learning environment. They help to reduce distraction and keep the focus on academic instruction.

- **Set specific and realistic goals.**

- **Maintain a high ratio of positive statements and rewards** to negative consequences and express respect for all students and their cultural and linguistic backgrounds.

- For teachers and administrators, **communicate clearly with parents and students.** Discuss student progress with students and parents on a regular basis.

- **Ensure that consequences for misbehavior are consistent** and do not disproportionately punish students of color or students with disabilities.

- **Model active coping strategies.** The move to online learning is frustrating for both teachers and students. Teachers can use that frustration as an opportunity to model ways to positively cope with frustration, for example by describing how they set up their online teaching environment.

- **Teach social-emotional learning strategies** that students need to succeed in school and society. These include learning how to manage your emotions, how to establish positive relationships, and how to make responsible decisions.

Fostering Student Well-Being

Anxiety related to current circumstances, adapting to the new way of schooling and home stressors can all disrupt children's cognitive processes. To promote productive learning, it is important to support and foster youngsters' well-being.

The science of well-being says that:

Emotional well-being influences educational performance, learning, and development.

Ways to foster well-being:

- **Establish routines.** In times of stress and turmoil, routines can help satisfy our human desire for comfort and predictability. Establishing and maintaining routines can help children cope, generally, and make schoolwork time more productive.

Good interpersonal relationships and communication help to facilitate the teaching-learning process and students' social-emotional development.

Ways to foster good communication:

- **Provide opportunities for collaborative discussion** and projects to allow peer relationships to develop. Use "breakout rooms" so that students can work together in small groups.

- **Nurture empathy.** It can be challenging to notice and understand that two people in the same situation may feel differently about the same subject. By noting examples of such differences, teachers can foster empathy and young people's ability to see things through a wider lens.

- **Encourage giving.** When people give to others and recognize the good things in their lives, they are happier and more satisfied. Helping children share and express gratitude for what they receive can increase their well-being and happiness and help them get through tough times.

- **Teach good communication skills.** Developing successful relationships with peers and adults depends on your ability to communicate thoughts and feelings through verbal and nonverbal behavior. You can help students develop these skills by prompting them to elaborate on their responses and to read and appreciate nonverbal cues. You can also model effective verbal and nonverbal communication yourself by matching your facial expression with what you say, using questions effectively, elaborating on your responses to students' questions, and seeking their perspectives. When students and teachers meet in person and wear masks, it is important to deliver and learn to read social cues using eyes and hands as well as tone of voice.

- **Use your role to facilitate emotional intelligence.** Educators can play a key role in helping children learn about emotions by establishing an environment where all children feel accepted, valued, and respected. Providing extra support for individual children when needed and fostering positive peer relationships are other ways to help kids learn the positive aspects of emotional expression.

Learning is situated within multiple social contexts.

We now know that academic learning is not limited to the classroom. It can also take place outdoors, at home, and online. With changing contexts for learning, it is that much more important to understand and incorporate the larger role that children's various backgrounds play in the learning experience.

Ways to foster a sense of shared community and respect for others' backgrounds:

- **Facilitate a common classroom culture** where youngsters can develop shared meanings, values, beliefs, and behavioral expectations, and feel safe and secure.

- **Create opportunities for family and community involvement** in a child's schooling, for example by inviting parents into the video classroom to teach a favorite game or song, or share a cultural experience.

Using Assessment Wisely

Assessment, or monitoring how children are doing academically, will play a major role in determining the extent of learning loss or gain during the pandemic, as well as in identifying additional curricula and mental health strategies needed to best serve children during this difficult time.

The science of assessment says that:

Making regular use of formative assessment—evaluating a students' progress while they are involved in a task—can effectively help to monitor their current knowledge and mastery of taught material.

Ways to do formative assessment:

- **Set specific, realistic goals** for each lesson and explain to students how learning will be assessed.

- **Intersperse two or three assessment questions** periodically during instruction.

- **Use a sufficient number of questions** to determine whether students have met goals for each lesson.

- **Make instructional decisions promptly** after collecting assessment data.

Making sense of assessment data depends on clear, appropriate and fair interpretations.

Ways to conduct fair assessments:

- In general, **use assessment scores only for the specific purposes** for which they were designed. For example, are children being compared to one another, to their previous performance, or to standard answers that teachers, test or curriculum developers provide for a lesson or unit of instruction.

- **Discuss student progress** on a regular basis with students, parents, and teachers.

- **Remember that the same assessment instrument,** whether a test or an assignment, may have different outcomes for students from different cultures, communities, homes, income levels, or who speak different languages.

- **Use standardized tests as a benchmark.** When students return to school, districts may return to using standardized tests to gauge benchmark skills for a given grade level. Standardized test may provide teachers, parents, and administrators with data to determine learning loss during COVID-19 and to provide direction for *school-wide* or *grade-wide*, rather than individual remediation efforts

ADDITIONAL NOTES ABOUT ONLINE ASSESSMENT

In face-to-face settings, teachers have a range of tools and behavioral cues they can use to assess student learning, but online, they may only be able to see a student's head and shoulders or no image at all.

As a result, teachers should consider other sources of assessment input such as having kids use Zoom chat or hand raising functions. Another good strategy is to use online organizational repositories where students can "bank" their work and teachers can provide feedback on those assignments.

Since it is difficult to control typical test administration processes online, teachers may also need to modify existing testing and assessment methods to emphasize student thinking beyond simple recall. For example, they can use "think-alouds," where they ask students to explain why they chose answers to particular multiple-choice questions instead of just indicating correct answers.

Championing Equity

Educational achievement gaps have grown even wider during the pandemic, particularly among ethnic and racial minority youth, children from low socioeconomic backgrounds, and students with disabilities. Poverty and lack of access to healthy food and safe and healthy places to socialize can significantly harm children's opportunities to learn.

Ways to promote equity:

- **Expand equitable access to broadband** and high-speed internet connectivity to underserved communities so they have the same opportunities to learn remotely as other children.

- **Provide teachers with professional development** to improve their ability to effectively use online instruction for reaching more students.

- **Ensure that young children are getting support** and monitoring in the use of online education.

- **Offer access to food** to students in need.

- **Prioritize assistive services** for children with special needs.

- **Support teachers with young children at home** so that they can be fully available to work with vulnerable youth under these trying circumstances.

Also:

- **Identify and promote the cultural competencies** of service providers in early childhood education. More resources in this area can be found here.

- **Ensure that vulnerable children are connected to** caring peers and adults in the school community. Please see recommendations from the section on motivation above.

- **Educate teachers about supporting** ethnic and racial minority students and how to inoculate children against stereotyping. More information can be found here.

- **Introduce teachers to information** on how culture, identity and context interact, and to interventions shown to increase achievement in ethnic and racial minority students. More information can be found here.
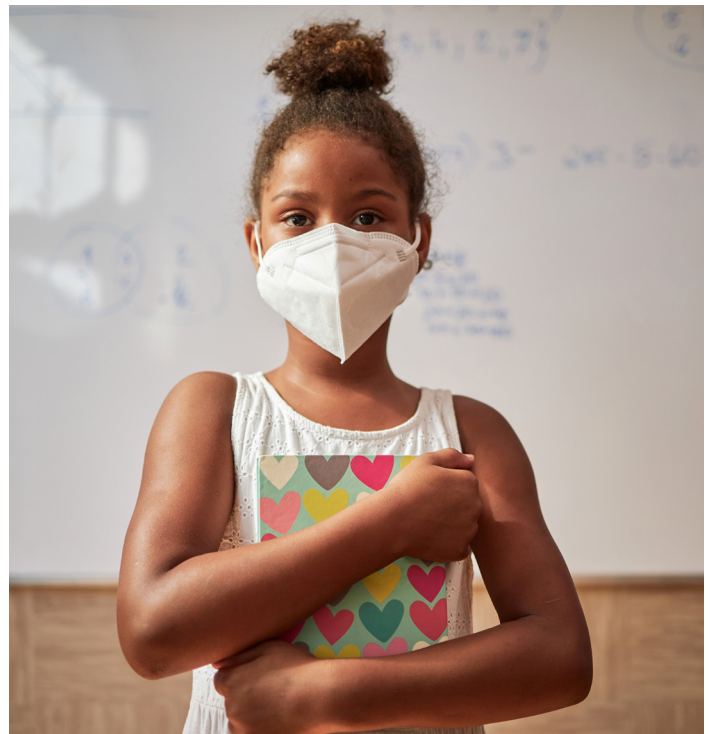
- **Build on the social, cultural, linguistic, experiential and intellectual assets** that students from diverse backgrounds bring into classrooms.

- **Promote student-centered teaching** whereby students can set social and academic goals, reflect on how they can help one another, and propose ways to improve.

- **Convey high expectations** through language that promotes students' best intentions and effort.

Build on the social, cultural, linguistic, experiential and intellectual assets that students from diverse backgrounds bring into classrooms.

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