

Recommended Practices for Early Childhood Classrooms during COVID Restrictions

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This position paper discusses how to ensure the quality of behavioral and instructional supports within early childhood classroom (ECE) activities amidst COVID-related restrictions. Early childhood educators face unique challenges in using developmentally appropriate practices (DAP) while modifying instruction to meet COVID pandemic health directives. Although important questions have been raised about how to ensure DAP during COVID (NAEYC, 2020a), we consider particular problems within classrooms serving 3- to 5-year-old children with a set of possible solutions. Note that these recommendations are not based on the highest standards of experimental evidence. Therefore, we outline below how recommendations are either based on: a) extrapolations of rigorous research in past causal impact studies (e.g., Frye et al., 2013), or b) have simply been observed to be feasible and useful by ECE experts who provide coaching to teachers within a longstanding professional development program called [Texas School Ready](#) (for program information see Crawford, Zucker, et al., 2017).

Impact of COVID on ECE Classrooms

The Spring of 2019-20 and the entire 2020-21 school year represent a period in which the global COVID pandemic has greatly impacted school and child care settings. Enrollment has declined in most ECE providers by an average of 67% while these programs are experiencing additional costs related to cleaning supplies, personal protective equipment (PPE), and increased staffing needs (NAEYC, 2020b). Many ECE teachers report decreased wages and increased feelings of anxiety about becoming ill or even symptoms of depression as the pandemic restrictions continue (Markowitz, Bassok, Smith, & Kiscaden, 2020). Implementing the Centers for Disease Control (CDC) recommendations requires extra consumable materials and staff costs estimated at hundreds of dollars per student (Range \$55 to >\$400; Rice et al., 2020). Meanwhile, coaches and training specialists who support ECE teachers report increased stress as they move professional development to remote modalities or modify their in-person supports based on changing local COVID guidance (Crawford, Vaughn et al., 2020).

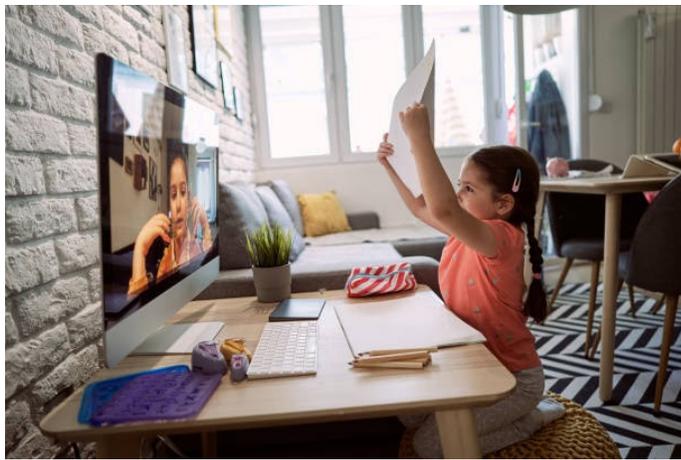
In sum, this is a time of tremendous stress, uncertainty, and change for adult educators as well as the children they serve. Therefore, we recommend selecting one or two of the recommended strategies below to focus on implementing at a time. Then revisit this list in a week or so to set new goals. As stated, we provide a list of recommendations based largely on observations by ECE coaches and curriculum experts serving the Texas School Ready program. We considered these types of questions that came from ECE educators and coaches:

- What changes can we make to materials at whole-group lessons, small-group lessons, and centers when they may have required close proximity or sharing of materials before the pandemic?
- How can we take advantage of the smaller enrollment numbers and smaller group sizes to increase the extended conversations and differentiated instruction?
- How can we adapt our instruction for increased outdoor time, considering weather or other potential changes?
- How can we adapt our indoor instruction for increased movement when children are not able to move freely or within proximity?
- How can we minimize disruptions to socialization opportunities between children in the classroom?

- What creative uses of materials, manipulatives, or new classroom routines can increase learning, engagement, or enjoyment during the school day?
- What developmentally appropriate conversations or books to share can support children's understanding of COVID restrictions?

Level of Empirical Evidence for Possible Solutions to COVID-related Problems

Instructional and behavioral approaches below in pre-COVID classroom settings. Thus, it is likely that some of these recommendations can have meaningful effects on children's academic and social-behavioral outcomes even in these new instructional realities. For example, there is moderate evidence that teaching numbers and simple operations to young children is important for their math learning (Fyre et al., 2013) or that teaching about letters and sounds is important for later literacy (e.g., Foorman et al., 2016). There is strong evidence that asking deep-explanation questions supports learning (Pashler et al., 2007). But the question is how do you effectively shift these sorts of instructional content to COVID learning environments?



A rapid meta-analytic review of studies on distance learning found only two Pre-Kindergarten studies, but these studies were not of sufficient quality to draw causal inferences about remote learning for young children (Sahni et al., 2021). A small number of ECE studies have documented promising practices specifically during the COVID pandemic. When schools closed in Spring 2020 many educators abruptly shifted to online or virtual learning. During this time, some teachers reported sending home songs, activities, or project-based learning assignments to do at home, such as planting gardens with their parents or researching

how the pandemic was affecting animals (Dayal & Tiko, 2020; Spear, 2020). Other educators created Letter Superhero themed lessons with playful online activities to learn letter names/sounds, search for letters around the house and practice writing letters in shaving cream or sand (Spear, 2020).

By the Fall of 2020, many centers had reopened with new procedures for in-person instruction that required social distancing, masking, and handwashing. Some ECE programs gave parents a choice of in-person or remote learning. As teachers had more opportunities to plan how to deliver virtual learning, some reported this helped them to be more creative and to use more visual supports to clearly communicate ideas (Kim, 2020). Some teachers are currently tasked with hybrid learning models where some children attend in-person while the teacher simultaneously works with remote learners who are joining virtually from home. This can be one of the most challenging models because teachers report working more than 13 hours per day, as it takes considerable time to prepare different versions of each activity for their in-person and virtual students (Justice, 2020).

Although we hope that educators do not have to sustain these efforts long-term, we hope you will find some helpful ideas in the extensive list below. **We express our gratitude to ECE educators around the world who are adapting and generating creative new ideas for in-person learning or hybrid learning models during COVID!**

List of Recommendations for ECE Classrooms during COVID

The list of problems and possible solutions below is organized first by behavioral and environmental issues, as these can be foundational to organize the virtual or in-person classroom for success. Next, we turn to a set of instructional recommendations to support children's literacy, math, and language learning.

Key Terms within Recommendations

- **In-person learning model:** Students are learning on-campus but following local restrictions such as social distancing and masking.
- **Remote/virtual learning model:** Environments that deliver instruction virtually online with a mix of synchronous and asynchronous online learning experiences.
- **Hybrid model:** A teacher has a mix of some students learning in-person and others learning remotely.
- **Synchronous instruction:** All students are present so that real-time, live, instruction between teachers and students is delivered online or over the phone.
- **Asynchronous instruction:** Students engage in the learning materials on their own time, interacting intermittently with the teacher

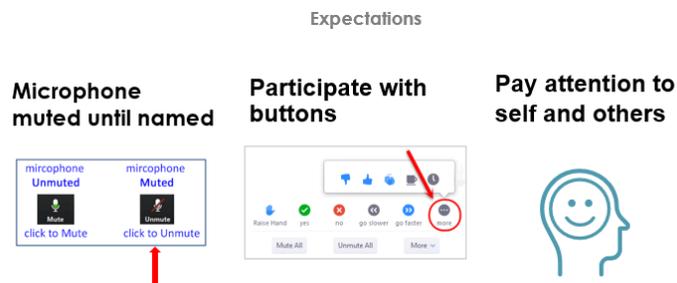
Behavioral Challenges & Recommendations

We consider five domains related to organizing the classroom environment and procedures amidst COVID.

1. Challenging Student Behaviors due to COVID

Problem observed: Challenging behaviors associated with children not knowing how to engage and follow COVID restrictions in diverse instructional environments - in-person, virtual or hybrid. For example, synchronous virtual lessons include problems with multiple students speaking at a time, students not paying attention, or distracted by toys, snacks, etc. For in-person learning, young children struggle with maintaining physical distance and keeping masks on.

Potential Solutions. Teachers are using visual aids to remind students of behavioral expectations before and during synchronous lessons. Teachers are also explicitly teaching why COVID restrictions are in place. When teachers work to prevent identified problem behaviors and the conditions that trigger them, this improves children's social and behavioral outcomes (cf. Epstein et al., 2008).



- In all models, teachers repeat a short set of behavioral **expectations at the beginning** of a lesson with visual aids. If hybrid, this includes expectations for both in-person and virtual learners, such as:

- Wait for your turn to speak - Equity sticks or an online app to draw students' names before answering questions.
- Track the speaker - In-person students walk up to speak and virtual students turn cameras on when speaking.
- Focus on learning - Put away toys or snacks until after the lesson.
- In all models, teachers can use a **“Ready to Learn” poster** as a visual reminder with children that shows children how to behave in a given situation.
- In all models, teachers can use **Social Stories** to teach about wearing masks, social distancing, hand washing, etc.
- In all models, teachers can engage children in calming **breathing exercises**. For example, a quick activity to help children self-regulate and bring quiet attention back to the teacher is to encourage the children to take calming breaths and gently move their arms up and down like butterfly wings.
- In all models, teachers can use a stuffed animal to create a **“class mascot”** and allow the mascot to teach lessons like social distancing and handwashing, etc.
- In-person teachers use **painter’s tape** to mark the spaces children can move in while maintaining physical distancing. For example, squares mark each child’s distanced spot a circle time or how far apart to stand as children line-up to transition from the classroom to outdoor play.
- Rather than nagging children about appropriate masking, in-person teachers are creating a job called **“classroom mask helpers”** whose job it is to hold up a photo of the correct mask etiquette during transitions - e.g., masks up reminder for indoors instruction vs. how to remove masks when seated for meals.
- Virtual/hybrid teachers can hold up video conference **feedback and reaction cards** (e.g., thumbs up/thumbs down icons, happy/sad face icons, raise hand cards) when they want children to share their feedback virtually.
- Virtual/hybrid teachers can take **screenshots of the buttons** in their video conference software (e.g., mute, camera on/off, reactions) and hold up a picture card of which button to find for each step of the lesson. For example, when the teacher holds up a “mute” picture card and says “Everyone press mute until I call your name. Then you press it again to turn your microphone on.”

2. Restricted Child Movement

Problems observed: Children’s movement is restricted for large portions of the school day. This can occur for some in-person locations where local approaches are to have children stay at their desks for most of school hours. This can also occur during virtual models because children spend much more time sitting in front of a screen than in a normal instructional setting.

Potential Solutions. Teachers are increasing **opportunities for music and movement**. This includes various strategies that maintain distance for in-person learners. For virtual learners, teachers incorporate screen breaks as well as opportunities to move. Given that restricting movement can trigger misbehavior, proactively addressing too much time seated or confined may improve children’s social and behavioral outcomes (cf. Epstein et al., 2008).

- For all learning models, add **non-locomotor movement chants and games** to the daily schedule or as a transition between activities. This may include standing, kneeling, lying or sitting, bending, shaking, turning, rocking, and swaying as transition activities. For example, games such as Simon Says, Frozen Feet (pretending that their feet are glued to the floor), or

acting out the song “Heads, Shoulders, Knees and Toes” all allow students to move without traveling near other students or out of the camera view.

- For all learning models, when students appear restless during a lesson, teachers can use a simple yes/no type of question but with a **“sit or stand” response** instead of answering yes/no. For example, where the teacher could read out some statements (e.g., “stand” if you have a sibling; “sit” if you are wearing the color ‘red’)
- For all learning models, ensure **outdoor play or active movement** is included in the daily schedule. Even a short walk can help children get some exercise, refocus, and possibly have a mask break (depending on the site’s regulations for wearing masks).
 - Play games that do not necessarily need manipulatives such as, Red light, Greenlight, Simon Says-6 ft away, Mother May I, the Hokey Pokey, Hopscotch, Scavenger Hunt, etc.
 - On rainy days, consider using websites such as Go Noodle that include movement to songs.
- In all learning models, teachers are reading aloud rhyming books and asking students to **stand up and act out the repetitive/rhyming portion of stories**. For example, when reading *Chika Chika Boom Boom*, teachers are asking students to stand up next to their desks and act out the boom with a stomp each time they hear the word. Or teachers can show students how to act out *We’re Going on a Bear Hunt* while maintaining social distance.
- In-person learners can bring **yoga mats or blankets** to school to sit on them besides their desk for portions of the day. Explain to students when it is appropriate to move to their yoga mat (e.g., during reading, but not during a math lesson)
- In-person teachers can provide a variety of materials that can be used to define personal space that is portable and can be shifted around the classroom, such as **hula hoops, carpet squares**, yoga mats, etc that allow for children to have some additional space to lay down while reading or using manipulatives.
- In-person teachers can conduct **read alouds outdoors** and tie them to an outdoor concept to increase opportunities for movement. For example, read a book about using your five senses and explore the senses outdoors.
- In-person teachers can add a couple of private nooks that allow an individual space and time away from the whole group. Treat these **stretch out areas** like a classroom center that has a sign to show whether the space is available or in use.



3. Limited Social Interaction Opportunities

Problems observed: Opportunities for social interaction are too limited for young children to develop social communication skills and self-regulation skills to manage challenging interactions with peers.

Potential Solutions. Routine peer interactions are important for all young children; therefore, teachers can structure virtual conversations or provide children with safe ways to explain their feelings, express gratitude, and resolve conflicts all while maintaining social distance. For English learners, it is important for students at different levels of the English language to work together on academic or social tasks (Gersten et al., 2007).

- In all learning models, teachers can use **equity sticks** to manage turn-taking. These are popsicle sticks with all students' names on them; teachers randomly select sticks until all children have had a chance to participate. Online apps like Pick Stick or online spinners can accomplish this virtually.
 - This can promote high rates of student engagement and on-task behavior as all students are thinking about the answer until they know who is called. If a called student feels too shy or they are unable to participate, let them know that is okay and make a plan to check with them individually later.



- In all learning models, teachers can incorporate a **puppet show** related to the theme/unit of study. Students can interact with each other through assigned roles. Family stories such as the *Three Little Pigs* can allow both in-person and remote learners to make a stick puppet and pretend to act out the story via videoconference.
- In all learning models, teachers can create a stack of **conversation starter cards** that have simple topics for children to discuss. For example, children can talk to a peer about “What’s your favorite food?” in virtual breakout rooms or by turning and talking to a partner.
 - Instead of in-person teachers saying “**turn and talk**” to your elbow partner, teachers can ask students to sit with their legs straight out and shoes almost touching their partners.
 - In-person classrooms with access to multiple tablets can create two “**video-phone booths**” on separate sides of the classroom.
 - Virtual teachers can use free **video conference breakout rooms** that can protect the children’s privacy, such as Zoom. There are apps, such as Caribu that provide opportunities to look at books or engage in online activities together.
 - Virtual learners can **record 1-minute messages** on tablets for a peer to listen to and respond asynchronously.
- In all learning models, **Show and Tell** activities give children time to discuss specific interests and can connect to learning topics and themes.
- In all learning models, teachers can create “**Spirit Week**” activities and allow children to tell the class about their item. For example, if all students wear a hat on Friday, then each child can draw/write and talk about their hat.
- For all learning models, give children routine opportunities to **name their feelings** and help them handle difficult emotions. When children understand basic emotions (e.g., mad, sad, scared,

happy), use visual aids and characters in books to teach complex emotions (e.g., frustrated, anxious).

- In-person teachers can use small buckets or decorates for each other and develop friendships.
- Some in-person teachers have created new **classroom hed** boxes and **individualized “mini-mailboxes.”** This allows students opportunities to draw pictures or give recognition to classmates that they see following COVID guidelines. Teachers have also created a new **helper job called “Safety Star”** in which they have a child help with selecting a classmate who they see wears their mask correctly and keeps a physical distance between other classmates, during a select point of the day. Children learn to give specific praise to their peers and **express gratitude** for keeping their community safe.
- For virtual learners, **“I Spy” games** with thematic connections in the home and opportunity to share and talk about them. For example, “Go around your home and find something that that grows. Tell us about it.”
- For virtual learners, allow kids to hold up a printed **microphone icon card** when they want to share something.

4. Sanitizing Materials

Problems observed: Sharing classroom materials is not permitted in many locations. Shared items must be sanitized.

Potential Solutions. Teachers are providing individualized materials and coming up with more efficient ways to sanitize objects.

- For in-person and virtual learners, **individual supply boxes** for each child are prepared before lessons. For example, this includes individual dry erase boards, markers, and pointers.
 - Some teachers are creating **individual laminated alphabet charts, number charts** and other daily concepts in each child’s hands as teachers review these concepts during morning circle time so each child can point and follow along, rather than taking turns sharing a large pointer.
- For in-person learners, teachers can **rotate art supplies** across days so that some kids use crayons one week but a few days later they use watercolors.
- For in-person sites, a classroom bucket labeled **“Items to be Washed”** located near the door lets all children help with clean up. After the child is finished playing with an item or set of items, the child or teacher places the item in the bucket.
 - Another staff member at the center or afterschool volunteer is responsible for washing/sanitizing the items and returning them to the classroom in a clean bucket. The teacher then puts the items back on the shelf.
- Children could have **individual copies of books** that they keep in their own book bag and can take with them while they relax in a center or outdoors to read under a tree on a blanket.
 - Some sites have books available for download (such as <https://monkeypen.com/pages/free-stories-for-kids>) as a pdf file which can be printed and then inserted into plastic page protectors or laminated.



5. Fewer Classroom Centers or Independent Workstations

Problems observed: Objects that are shared must be sturdy enough to be sanitized. Therefore, many teachers are offering fewer classroom “centers” or none at all. ECE classrooms use center areas around the classroom for play-based learning, independent practice of taught concepts, and peer interactions. Many areas have COVID restrictions for soft objects, books, or manipulatives that cannot be easily cleaned. Thus, some centers are lacking literacy materials required for quality play (e.g., materials to write a list at the pretend-and-learn center).

Potential Solutions. In-person teachers have found clever ways to offer children these important opportunities for the independent practice of concepts and playful approaches to learning that meet local restrictions.

- Some in-person teachers have set up eight to ten centers so that **half are open one day** and the next day the others are opened. Centers areas are cleared marked with an “open or closed” sign before each day. This reduces sanitizing time as it allows books or items that cannot easily be cleaned to sit untouched long enough that the virus cannot survive on the surface.
- When local health guidance requires very limited movement in the classroom, teachers create **tabletop center as bins**, ensuring at least twice as many activities boxes are available to ensure children still have some choice in their independent learning. Put everything a child would need to accomplish that center activity. For example, art center boxes could include glue sticks and various collage materials. For a science center activity, the box may contain several different rocks to look at and a magnifying glass.
- For in-person settings, teachers can use **outdoor play and learning centers** for children. Teachers can set up enough individual areas for activities such as painting with water and other non-traditional materials you find outside. Or set up individual stations with real paint on large papers. Use what’s in the natural environment to develop center ideas, such as making outdoor blocks using small branches or wood. Use chalk to write on sidewalks or fences. All students can be responsible for assisting with disinfecting toys used outside or placing them in a bin to be washed.
- For remote learners, create a **virtual Kid’s Book Club** where they tell us or each other about a book they have at home or from books that the teacher can send home. Children can ask questions about the book.
- For remote learners, create interactive **virtual centers** using Google Classroom or Bitmoji classrooms. Then assign interactive games that can be played online with two or three children such as Charades, Alphabet Bingo, or online Connect Four.



Instructional Challenges & Recommendations

We address three domains related to ensuring high-quality cognitive instruction in areas such as literacy, math, and language arts.

6. Literacy Instruction with Hands-On Materials

Problems observed: Early literacy instruction often requires sharing objects (e.g., magnetic letters, writing tools) that cannot be sanitized during a lesson.

Potential Solutions. Teachers are preparing personal sets of materials before literacy instruction to ensure high engagement of all students as continued use of hands-on materials. Developing an understanding of letters and sounds is foundational to later reading (Foorman et al., 2016) and this connects graphical presentation of letters with verbal descriptions (Pashler et al., 2007).

- For all models, teachers can prepare a set of letter tiles, moveable letters, or printed **letter cards for each child** before literacy lessons. The teacher models with her own set of letters as students complete a series of activities with these letters over several days. “Let’s sort out letters into groups by shape - straight lines, curved lines, or both.” or “Let’s play letter hunt. I will say a letter’s name and you find the letter in your bag.”
- For all models, teachers can model how to write a letter then asks students to **skywrite the letter** and/or write the letter on their **own dry erase board**, “When I write uppercase B I draw a straight line down, then a bubble at the top and a bubble at the bottom. Let’s skywrite the letter together as you stand up and pretend to write with your finger. Now let’s practice writing on our dry erase boards.”
- For in-person interactive writing activities, two cups of “**clean**” and “**dirty**” **chart paper markers** are prepared before the lesson. This allows children to come up during circle time to practice circling focal letters, adding missing punctuation, or even writing letters/words with teacher support.
- When in-person, instead of hand-over-hand scaffolding to model how to form letters, teachers keep a letter chart six feet from the shared writing area or use their own smaller dry erase board to **model correct letter formation** that the child can immediately repeat.
- For virtual learners, teachers can create a **virtual Letter Wall** in Google Classroom or on a PowerPoint slide with word cards (word and picture) for the teacher to manipulate based on child responses or for a child to manipulate virtually on a whiteboard or through sharing of the screen.
- For virtual learners, teachers can use a **Letter Scavenger Hunt** to find common items that children can find at home to enhance the lesson. Ex. Find a letter “A” in your house, etc.



7. Math Instruction & Manipulatives

Problems observed: *Math instruction with manipulatives* often requires sharing objects (e.g., unifix cubes for nonstandard measure, tangrams for teaching shapes) that cannot be sanitized during a lesson or are not available at home. *Learning to count or complete early number operations* often requires hand-over-hand scaffolding or physically proximal teacher support to model one-to-one correspondence.

Potential Solutions. Teachers are preparing individual materials before math lessons that ensure daily opportunities to count objects, recognize numerals, and compare quantities. Teaching numbers and operations are foundational in developing later mathematics skills (Frye et al., 2013). There is some support for early instruction in geometry, patterns, measurement, and data analysis is foundational in developing later mathematics skills (Frye et al., 2013). Therefore, teachers should spend some time finding creative ways to teach these math concepts.

- In all models, teachers can give every child an **individual 1-10 number chart or number line** with a pointer to follow along as the teacher models rote counting while pointing to numerals or as a reference while children take turns coming up and counting objects displayed on-screen or at a physical distance. Move up to a 1-20 number line when students are ready for a challenge.



- In all models, one of the most important activities is daily activities for counting objects. Teachers give each child their **own set of counters**. They can also use ice cube trays or muffin tins to count out common household objects one by one. At home, give parents advance notice to supply objects before counting lessons.
- In any model, use **common, inexpensive items to sort**, such as beans, pasta noodles, or dry cereal that can be disposed of after use. Teachers can also use common materials such as pennies, paperclips, crayons, etc. that can be sanitized or put on a break after use.
- In any model, teach **nonstandard measurement** with common household/classroom objects of the same size (cheerios, legos, plastic drinking straws, etc.)
- In any model, use a **shapes scavenger hunt**. Show children a specific shape and ask them to find shapes around their home or classroom to enhance the lesson. For example, this is a square. Find a square in your house.
- In any model, a set of **laminated number cards** for each child, which could be stored in their box of materials or their cubby. These cards could be used for a variety of activities.
- In any model, ask children to use an object that can be sanitized to **demonstrate positional words**, “Can you hold your spoon over your head? Under your chin? Beside your ear? Next to your nose?”
- In any model, use natural items outdoors to encourage children to make **nature patterns**, “Show me a pattern that you can make with your rocks and some leaves that are nearby.”
- For virtual learners, use clipart/online images to explain a **simple number stories**. For example, Show 4 butterflies and say “Who can tell me how many butterflies you see?” Then on the next slide explain that one flew away “How many butterflies are left?”
- In virtual models, create **interactive graphs/charts** based on student preferences (e.g., favorite color) with an online whiteboard. Children can draw the first letter of their name or teachers can make a tally under their choice.

8. Conversations that Support Higher-Level Thinking

Problems observed: Too often virtual learning functions more like a lecture than a back-and-forth conversation. Even in-person classrooms may be struggling to ensure daily rigorous conversations because student-teacher interactions are more distanced.

Potential Solutions. Opportunities to respond to questions that require deep thinking (why, compare, what if) can improve learning and memory (Pashler et al., 2007). Therefore, ECE teachers should ensure daily opportunities for deep-explanation questions are presented in both in-person and virtual learning environments. Many teachers are taking time to prepare these sorts of challenging questions in advance, rather than relying on spontaneous opportunities for deep explanations questions because conversations are less predictable amidst COVID.

- In all learning models, teachers are using conversations before and after **shared book reading to ask guiding questions** or essential questions that require deep-explanation. Consider using a sticky note on the book with a set of Why, What if, and Comparison questions. Or if you are doing a virtual read aloud, you can write your question on a slide to show students before and after reading so they know you will take time to hear what they are thinking about these book-related questions.
- For in-person learning, when students are masked and seated at a distance, they **turn and talk to their partner** about a Why, What if, or Comparison question with their partner. The teacher circulates and supports children in explaining their ideas. This is a great way to answer guiding questions to discuss after the book reading.
- In all learning models, teachers are being creative in crafting lessons about how germs spread, reading books about how to stay healthy, and how to care for others. When **children understand why restrictions** are in place they are more likely to comply with guidelines.
- In all learning models, teachers are using sorting activities that allow students to take turns **sorting real or virtual picture cards** into a pocket chart or virtual chart. After sorting their card, the child remains at the distanced position in the front of the classroom or unmutes their microphone to explain *why* they selected the category they did.
- In any model, have a bucket or bag of **conversation starter cards** and have children share in virtual whole group or in break out rooms. Ensure questions require deep thinking, such as “What if you were a giant?” or “Would you rather be a bird or a horse? Why? There are many existing products with good questions such as Table Topics for Kids or Mindfulness Game Cards for Kids.
- In all models, teachers can ask questions as they take **virtual field trips** connected to their theme/unit of study. For example, take a virtual trip to the San Diego Zoo when talking about Zoo Animals units. Or take a virtual trip to Mount Rushmore when talking about presidents. Then plan questions that require students to explain what they saw or what they are still wondering about.

Step-by-Step Examples Across Learning Models

This section describes more details of the successful approaches teachers have been observed using with success for all models - virtual learning, in-person learning, and hybrid learning - during COVID.

Planning Short Virtual Lessons in ECE (10-20 minutes)

Introduction (1-2 min)

- Welcome all students by name as you show a visual list of materials students need
- Recite a class song or chant to open (ask students to mute and follow the lead of the teacher and selected helper)

Lesson (8-12 min)

- Retain the I Do – We Do – You Do steps (Model, Guided Practice, Independent Practice)
- Interactive Component (2-5 min)

Guided practice

Closing (1-2 min)

- Prep for linked, asynchronous assignments/independent practice
- Wind down – song or chant to close (ask students to mute and follow the lead of teacher and selected helper)

Managing Behaviors in ECE In-Person Classrooms during COVID

Explain how students should conduct themselves in various situations that can trigger problem behaviors:

- Arrival and departure
- Distributing materials
- Requesting help from the teacher
- Sharing answers to teacher questions
- Transitioning to new activities
- Interruptions such as substitute teachers
- Working independently at centers during small groups

Supporting Positive Behavior in a Hybrid Lesson	
<p>Be flexible with timing and adjust the schedule, as needed</p> <ul style="list-style-type: none"> • Break content into smaller chunks • Record meetings and post in a routine location 	
<p>Virtual Learners</p> <ul style="list-style-type: none"> • Develop ground rules <ul style="list-style-type: none"> ○ Agree to when microphones off/cameras on ○ Keep equity in mind – not all kids have sufficient internet connectivity/data for cameras on • Keep supply list simple <ul style="list-style-type: none"> ○ As kids enter the room remind them of supplies needed • Help kids keep common supplies readily accessible <ul style="list-style-type: none"> ○ Crayons, markers, pencils ○ Paper ○ Dry erase board, markers ○ Give parents advance notice for special supplies (print outs, construction paper, glue, tape, scissors, toilet paper rolls, etc.) <p>Consider purchasing sets of key manipulatives to give to each family (e.g., letter picture cards, unifix cubes, dry erase board)</p>	<p>In-Person Learners</p> <ul style="list-style-type: none"> • Develop ground rules <ul style="list-style-type: none"> ○ Agree to when microphones raise hand vs. call out answers ○ Remind students of how to cope with delays when the teacher is responding to virtual learners • Prepare supplies in advance <ul style="list-style-type: none"> ○ As kids enter the room have them pick up individual bags/bins of needed supplies • Help kids keep common supplies readily accessible <ul style="list-style-type: none"> ○ Crayons, markers, pencils ○ Paper ○ Dry erase board, markers ○ Keep separate, prepared art boxes for each student (glue, tape, scissors, toilet paper rolls, etc.)

Supporting Teachers to Improve Instructional Quality Amidst COVID

We report elsewhere (Crawford, Vaughn et al., 2020) how coaches within the Texas School Ready professional development program shifted their approaches to remote delivery during the COVID pandemic. We documented broad changes to support teachers' emotional needs in a time of stress while setting achievable goals to improve instructional quality. Through focus groups and surveys, the 60 (TSR) coaches and their statewide project manager, and five regional program managers described how they shifted their training activities amidst COVID to include: a) facilitating entirely online courses remotely rather than the past approach that used a blended learning format of in-person sessions alongside an online course; b) offering remote or face-to-face coaching choices were given, depending on local COVID requirements that may not have allowed coaches to visit classrooms; c) modifying child progress monitoring assessments for remote delivery, if needed for teachers providing virtual instruction; and d) providing a new state-approved, digital curricula with access to an online family activity collection to

support teachers working across in-person, virtual or remote models. We found that coaches were able to briskly acquire remote coaching competencies and offer a variety of recommendations for new behavioral and instructional challenges observed in early childhood classrooms amidst COVID. **Again, we express our gratitude to ECE educators who are adapting and generating creative new ideas for in-person learning or virtual learning models during COVID!**

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