AN OVERVIEW:

DISTANCE & HYBRID TEACHING PRACTICES

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DISTANCE TEACHING AND LEARNING

COVID-19 has brought many changes to our schools and educational system. Moving from spring 2020 to fall 2020, one of the most significant changes in distance teaching and learning in California was the push to standardize and, in many cases, increase the amount of instructional time students received. Language in SB-98, the education omnibus budget trailer bill, specifies a minimum number of instructional minutes for all students based on grade level for the 2020-2021 school year:

- 180 instructional minutes per day for students in transitional kindergarten or kindergarten;
- 230 instructional minutes per day for students in grades 1 to 3; and
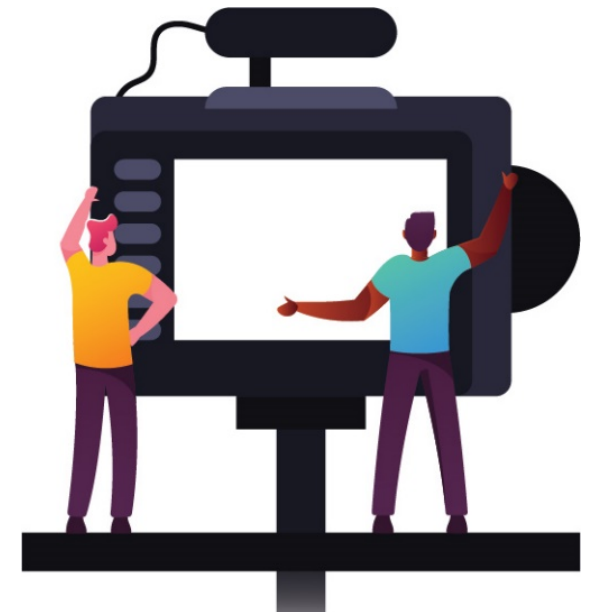- 240 instructional minutes per day for students in grades 4 to 12[1].

The California Department of Education (CDE) further clarified:

In distance learning, instructional time is calculated based on the time value of assignments made and certified by a certificated employee of the LEA in which the student is enrolled. Those assignments can include assigned instruction or activities delivered through synchronous or asynchronous means. Synchronous opportunities may include whole-group instruction, peer interaction and collaboration, two-way communication, small-group breakouts, or individual office hours. The delivery method should match the purpose of the current learning outcome, corresponding task, and program placement (i.e., Language Acquisition Program). At times it may be appropriate for new content to be delivered asynchronously utilizing synchronous time for peer interaction, small-group breakouts, or individual office hours. Inversely, at times content may require synchronous opportunities to include direct instruction on new content. All modes should provide students a means of checking for understanding and progressing based on that understanding.

[CDE website, Distance Learning Instruction Planning Guidance]

One key take-away from the CDE's guidance on distance teaching and learning is that the minimum number of instructional minutes is meant to be fulfilled through a combination of synchronous and asynchronous instructional practices, including direct instruction, student collaboration, and independent application activities. Unfortunately, too many administrators and school districts have interpreted the minimum number of instructional minutes narrowly, expecting teachers to conduct 3-4 hours of synchronous online direct instruction per day. This is neither consistent with the letter or intent of the statutes, nor is it sound educational practice. Students should not be expected to sit through hours of online instruction when both teachers' professional judgement and state regulations call for both synchronous and asynchronous instruction, time for students to practice and apply learning within the school day, and student interaction with peers as well as teachers.

The remainder of this section is dedicated to examining a variety of synchronous and asynchronous instructional practices – some teacher-directed, others student-led, collaborative or even independent – that can make up a well-rounded, engaging and rigorous "instructional day" in a distance teaching and learning environment.

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[1] Or 180 instructional minutes per day for certain high school students co-enrolled in community college, California State University or University of California courses, or who attend a continuation high school.

SYNCHRONOUS
TEACHING AND LEARNING

"Synchronous" teaching and learning means "live," with teachers and students interacting in real time, usually via an online video conferencing platform such as Zoom, Google Meets, SeeSaw or Bitmoji Classroom .

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In general, synchronous teaching and learning has the potential to be more interactive and is often best used for more complex lessons and tasks where students will need more supervision and support.

For the purpose of this overview, we have grouped synchronous teaching practices into five broad categories.

ONE	TWO	THREE	FOUR	FIVE
Live Whole-Group Instruction	Live Small-Group or Individual Instruction	Live Learning Application Activities	Live Formative Assessment	Live Comprehensive Assessment

1. Live Whole-Group Instruction

Maybe the most intuitive activity for many teachers faced with distance teaching, live whole-group instruction includes traditional direct instruction and lectures, but should also involve mini-lessons, demonstrations, modeling and teacher-led discussions, calendar time, as well as group feedback and reteaching specific skills or concepts based on ongoing formative assessment. Live whole-group instruction can be a powerful tool, but in a distance teaching and learning setting, it can also be overused and should ideally be utilized only for short lessons followed by opportunities for students to apply learning, practice and interact, otherwise teachers risk attention fatigue and the loss of student interest.

2. Live Small-Group or Individual Instruction

In a traditional in-person classroom, there are times when it can be beneficial to pull a small group of students, or even a single student, aside for additional support with a concept, skill or task. The same is true in a distance teaching and learning setting, and just as in a traditional in-person classroom, it can be challenging to manage the rest of the class while working with the small group/individual student. Some suggestions for live small-group/individual instruction include:

- Use the breakout room feature available in many video conferencing platforms to have the rest of the class work independently on collaborative tasks while the teacher keeps the small group/individual student in the "main room" to work with them. If a teacher is fortunate enough to have a co-teacher partner or aide support, the teacher could work with the small

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[2] CA EdCode 53503 also allows for daily live interaction through "telephonic communication." Realistically, however, given that the same statute requires "*Daily live interaction with certificated employees and peers* for purposes of instruction, progress monitoring, and maintaining school connectedness" [emphasis added], in order for a teacher to not have to use some form of online video conferencing for synchronous instruction, they would have to call every student every day and devise an alternative means for live student-to-student interaction. In most cases telephonic communication will, therefore, be suitable for communicating with students who are otherwise unable to join the regular class video conferences or need additional outreach rather than serving as the primary platform for instruction.

group/individual student while the co-teacher/aide works with students in the breakout rooms.

- Have the rest of the class log-out for a few minutes to work independently offline while the teacher remains logged in and continues working with the small group/individual student.

- Schedule small-group/individual time during a time in the daily schedule when the teacher is not synchronously engaging with the whole class, such as teacher office hours or other unstructured time.

Synchronous individual instruction could also take the form of telephone communication between a teacher and students or students' parents or guardians. This may not be a viable long-term approach for delivering large amounts of content or direct instruction, but calling a student to provide feedback or redirection on an assignment or calling parents to discuss how they could help support with a task or project are useful strategies in distance teaching and learning and may be more effective in some situations than attempting a video conference. Note, however, that in order for telephonic communication to be considered "synchronous," both the teacher and student (or parent or guardian) must be on the call at the same time and be able to have a two-way conversation; leaving messages and other forms of one-way communication are not synchronous.

3. Live Learning Application Activities

There are many ways students can practice and apply their learning, but with state requirements for daily live interaction with peers and what we know about how students learn and process information, practice and application through interaction and collaboration with other students is a key to successful distance teaching and learning. This is especially true for English learners who need to continue developing their communication skills and students with disabilities who may need additional processing time and exposure to different perspectives to meaningfully access content. Now more than ever,

students need to interact with peers to help combat the feelings of social isolation many are experiencing during the COVID-19 pandemic. Just as in a traditional in-person classroom, short whole group discussions can be engaging, but only a few students are able to participate at a time while the rest watch. More likely, teaches will need to use tools like the breakout rooms available in most video conferencing platforms to divide students into small working groups. Breakout rooms make many teachers nervous because students are "alone" and not being directly supervised, but the same strategies teachers use to manage small groups in a traditional in-person classroom can be used to make breakout rooms a safe and effective place for students to interact and collaborate. Some suggestions to make breakout rooms more manageable include:

- Give student groups specific tasks with specific outcome expectations. Design breakout room activities that require turn-taking and collaboration; avoiding activities where one student could do everything while other students sit back or are excluded.

- Keep groups as small as possible to maximize engagement and collaboration opportunities. As groups get larger, make sure that each student has a job to do and a role to play.

- Don't give groups more time than they need to complete the task. Too much time can lead to a loss of focus and an opportunity for non-desired off-task behavior. It is better to start students with too little time and then give them an extension if they need it than to start them off with too much time and have them goof around.

- After returning from breakout rooms, have student reporters share out what their groups accomplished. Even if teachers can't have every group share, selecting a few groups at random to share adds another layer of accountability for work done in breakout rooms.
- Prior to moving students into breakout rooms, review norms and behavior expectations. Also, provide students with a private

avenue to report inappropriate behavior to teachers (and teachers MUST follow up on reports of inappropriate behavior). Debrief with students occasionally on process, what's working well and what's not.

- If teachers are fortunate enough to have a co-teacher partner or an aide, the co-teacher/aide could work in a breakout room with students who are struggling and need additional academic support, or with students who are having behavioral issues. If teachers don't have a co-teacher partner or an aide, they can maintain students who need extra support or supervision in the "main room" to work with them there.

- Explore the settings in the video conferencing platform that might assist in supervision. Every platform is different, but some allow saving and downloading chat logs (useful if a student has a history of making off-topic or inappropriate comments) or the video recording of breakout rooms. There are also tricks that allow a teacher to log in multiple times, like logging in through his or her computer as the host, and then again through a cell phone as a participant, allowing the teacher-participant to join breakout rooms while the teacher-host can still monitor the "main room."

- Finally, as with any new activity, start small. Start with having students do quick, low-stakes introductory activities in breakout rooms and gradually increase the duration and complexity of activities as students demonstrate the ability to manage the freedom and responsibility successfully.

4. Live Formative Assessment

A good way to maintain student attention during online instruction is to pause occasionally and check for student understanding, at least once every 5-10 minutes. Just as in a traditional in-person classroom, teachers could call on volunteers for responses, but that would only engage a few students. Instead, teachers can ask all students to respond simultaneously using verbal call and response, hand gestures like Fist-to-Five, color-coded response cards, in writing in the chat box of the video conferencing platform, or by writing their answers on a dry-erase surface and holding them up to the camera so the teachers and other students can see. Remember, too, that students still benefit from think time. Teachers should consider asking questions and then giving students a minute or so to write their answers on paper first, and then type them into the chat box, or to write answers on a dry erase surface but not hold them up until the teacher calls to see them. One strategy called "Waterfall Chat" has students type directly into the chat box but not press the *submit* button until the teacher asks everyone to submit at the same time. There are also a number of fun quiz and polling apps like Padlet, Quizlet, Poll Everywhere and Answer Garden where students respond individually, and teachers can display responses back to the whole class. These apps are great for promoting further discussion and identifying whether or not the class, as a whole, is on the right track or needs further instruction.

5. Live Comprehensive Assessment

Throughout instruction and application work, teachers engage in ongoing formative assessment to check for student understanding and assess the need for additional support or reteaching, but at some point, teachers will also need to do more formal comprehensive assessment. These are usually the assessments that come toward the end of a chapter or unit of study and are meant to measure student progress toward a goal at a given moment in time. They often weigh heavily on students' grades. Traditional forms of comprehensive assessment include tests, writing assignments, presentations, portfolios and other demonstrations of learning. In a distance teaching and learning setting, however, live synchronous time with students may be too precious to spend doing a lot of formal assessment; live synchronous time is better used for engaging instruction, student interaction, quick formative assessments, etc., and many of the most rigorous and valid forms of comprehensive assessment can be conducted more effectively asynchronously. Still, there is a place for quizzes and even tests during synchronous time,

particularly short-answer and multiple-choice forms used to assess foundational knowledge and skills that students will later use to build more complex understandings. In these cases, teachers have several of options. If the assessment is quick, like a short 5-question quiz, teachers can share a link to a Google Form or quiz app in the chat box of the video conferencing platform and direct all students to begin at the same time. Students remain logged-in to the video conferencing platform (ideally with cameras on) while they take the quiz, and 5-10 minutes later, teachers close the quiz and collect student responses, reviewing answers with students immediately afterwards. If the assessment is longer, like a full test, teachers could still post a link in the chat box and students would either take the test while logged-in to the video conferencing platform or they could log out to take the test and log back in again at a specified time after the teachers has closed the test and collected student responses. As one can imagine, however, there are increasing risks of "contaminated" test results (i.e., cheating) with longer, unsupervised testing periods and more easy-to-copy tests. If teachers choose to use this type of assessment, it should definitely be part of a larger evaluation system that includes multiple measures to ascertain students' knowledge and skills and should not, in and of itself, carry significant weight in determining students' grade.

ASYNCHRONOUS
TEACHING AND LEARNING

"Asynchronous" teaching and learning means instruction and student learning are happening at different times. Asynchronous instruction gives teachers flexibility in when they prepare and publish a particular lesson and gives students a degree of control over the time and pace of their learning, allowing them to decide when in their schedules they will work on assignments and how long they need to spend on those assignments.

Using online entertainment media as an analogy, if synchronous teaching and learning are "live," then asynchronous teaching and learning would be "on demand."

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For the purpose of this overview, we have grouped asynchronous teaching practices into five broad categories which closely parallel the five categories of synchronous practices.

SIX	SEVEN	EIGHT	NINE	TEN
On-Demand Instruction (Whole-Group, Small-Group or Individual)	On-Demand Online Application Activities	On-Demand Offline Application Activities	On-Demand Formative Assessments	On-Demand Comprehensive Assessment

6. On-Demand Instruction (Whole-Group, Small-Group or Individual)

Distance teaching and learning involves both synchronous and asynchronous instruction. Because "live" time with students is limited (by schedules and students' attention spans), it is needs to be utilized as much as possible for engaging, active and interactive experiences. Teachers should consider, then, pre-recording some of their direct instruction using apps like Screencastify or Nearpod and posting it for students to access later. This gives students the opportunity to watch and re-watch lessons as often as they want or even to pause a lesson as they work through step-by-step instructions. Alternatively, some teachers may want to try "flipping" their schedules, asking students to watch instructional videos *before* class and then using the opportunities for live interaction to supervise students as they apply the skills and knowledge they were exposed to beforehand. Apart from instructional videos, students could watch informational videos with content on a relevant topic, or watch/listen to a story being read aloud and follow along in their own

texts, listen to an audiobook, podcast or TedTalk, listen to a historic speech, or even participate in a curated virtual fieldtrip. There are a wide variety of asynchronous instructional experiences teachers can provide their students, but they all share the common characteristic of delivering meaningful content to students, either before or after a live session, at a time and pace students can control.

7. On-Demand Online Application Activities

There are many, many activities students can be assigned to do independently online. These activities range from typing answers into digital worksheets and keeping online journals to writing sentences/paragraphs/essays based on work students and teachers have done together in live sessions to doing independent research on assigned topics to project-based learning and creating videos, slideshows and/or digital artworks that explain a process or report on research. Students, maybe with the help of a family member, can record videos of themselves reading with apps like Flipgrid or

Animoto and send the recordings to their teacher for review (note that siblings, pets and stuffed animals make excellent video reading audiences for younger students). Most recent textbook adoptions also include suites of online activities that students can work on independently to practice and reinforce concepts from the textbook, and many schools own or subscribe to adaptive learning software such as Accelerated Reader, IXL or ST Math that students can log in to from home and work on at their own pace. Teachers could even offer students a menu or choice board of different activities, embracing a variety of modalities and learning styles, including both online and offline activities, that gives students an element of choice and control over their own learning. The possibilities are limited only by students' ability to work on tasks independently; remember that many students will need explicit coaching, scaffolds and milestone check-ins in order to complete longer, more complex independent assignments.

Also, while asynchronous activities are often thought of as tasks students work on by themselves, many asynchronous assignments can also be completed collaboratively by pairs of students or in small groups if students have been trained how to work together online (both in the sense of how to set up an online collaborative session as well as understanding norms for respectful, productive online collaboration). Where teachers might once have hesitated to require students to collaborate after school, students should now have the time and the tools to do so within the distance learning school-day. Younger students could take turns reading to each other or reciting math facts. Older students could take turns solving and explaining math problems, or jig-saw a research topic and then use Zoom to meet and share their research, creating a group slide show in Google Slides, or they could take turns filming themselves reading a text and then combine the videos into a complete read aloud of a short story. To support asynchronous collaboration, many online file-sharing platforms like Google Docs allow remote peer editing; students could write something and post it for peer review and comments (teachers could require each student to comment on a certain number of peers' papers over a set period of time). And, like student interaction

and collaboration during synchronous sessions with the teacher, these collaborative asynchronous activities give students another opportunity to interact with peers and reduce feelings of isolation.

8. **On-Demand Offline Application Activities**

What might have once been called "classwork." Reading a printed book, and maybe taking notes on post-its or in the margins. Writing… with a pencil, not a keyboard. Doing math calculations and graphing by hand. Following instructions, like a recipe or doing a simple science experiment and recording observations. Drawing. Coloring. Cutting and gluing. Physical activity and exercise. Especially for younger students, the amount of screen time involved in distance learning can be overwhelming, so it is important to include a balance of offline activities as well. These activities can help younger students develop important fine motor skills as well as healthy screen-time habits. Teachers of older students, even into high school, should make sure students aren't spending the entire day on the computer and are instead still doing some paper-and-pencil work, some creative work, and a good amount of physical activity. Even while participating in synchronous online activities, teachers should require students to keep paper notebooks and take hand-written notes occasionally – to help with retention of information, to create a written record students can look back on for guidance, and also to help teachers hold students accountable for at least minimum levels of attention and engagement. With notes or any other type of hands-on, offline-line assignments, teachers can have students share by holding their work up to the camera so teachers can quickly check it, or students can take pictures of the work and send them to teachers though email, Google Classroom or the school's learning management system. This type of work should absolutely be reviewed by teachers, but if it is graded in any way other than *complete/not complete*, teachers should be sensitive to the different home situations of students and the availability of support and materials.

9. On-Demand Formative Assessments

Just as teachers can use online quiz and polling apps during a live session to check students' understanding, they can use many of these same apps asynchronously to see how students are doing, requiring them to respond by a certain time or date. Many of these apps allow quiz takers to see their own scores at the end of the quiz; teachers could give students the opportunity to learn from their mistakes and retake quizzes several times until they score well, and then use another assignment later for actual comprehensive assessment. Teachers could also introduce students to simple self-assessment rubrics describing learning goals and have students self-assess as part of the overall formative assessment process. A final option that some teachers may not be aware of is that the state-approved SBAC Interim Assessment Blocks (IABs, including performance tasks) have been okayed for home-use during distance teaching and learning and no longer require students to use a special secure browser. Especially now with the introduction of Focused IABs that only measure a few specific learning targets at a time, teachers might choose to use IABs as an occasional check to see how students are doing relative to the state standards and where they need additional instruction.

10. On-Demand Comprehensive Assessment

Comprehensive assessment usually comes toward the end of a chapter or unit of study and is meant to measure student progress toward a goal at a given moment in time. Forms of comprehensive assessment include tests, writing assignments, presentations, portfolios and other demonstrations of learning that can often be conducted more effectively asynchronously than during live synchronous time. Asynchronously, these assessments are "on-demand," available for students to take and turn-in when they choose, but they can still be more strictly timed than asynchronous instruction or asynchronous application activities; a teacher could tell students they have one week to respond to a performance task or assign a test that will become available at 8 AM in the morning and must be submitted by 4 PM that afternoon. A concern with any assessment conducted remotely and out-of-sight of the teacher is unauthorized collaboration (i.e., cheating); is a student getting help or looking up answers on the internet? With cell phones and electronic communication readily available to many students, one has to assume that some students may contact each other during any test. Therefore, multiple-choice and other easily-copied test forms are not well suited for asynchronous use, but authentic assessments that include open-ended questions, essays (even short ones) or recorded presentations that force students to think and formulate responses for themselves will prove safer, more rigorous, and more valid, despite the lack of constant supervision. If tighter control of the testing conditions is desired, however, teachers should consider using a small portion of their synchronous instruction time for supervised live synchronous assessment.

Table 1 provides a summary of the distance teaching and learning practices described in the previous two sections.

Table 1 – Summary of Distance Teaching and Learning Practices

SYNCHRONOUS					ASYNCHRONOUS				
online	online	online	online	online	online	online	offline	online	online
instruction	**instruction**	**application**	**assessment**	**assessment**	**instruction**	**application**	**application**	**assessment**	**assessment**
whole-group instruction	small-group/ individual instruction	classwork activities: practice, application, interaction, collaboration	formative assessment	comprehensive assessment	whole-group and/or small-group/ individual instruction	classwork activities: practice, application, interaction, collaboration	classwork activities: practice, application	formative assessment	comprehensive assessment
live lectures, mini-lessons, explanations, demonstrations, modeling, teacher-led discussions, calendar time; also feedback, re-teaching	live mini-lessons, explanations, demonstrations, modeling, teacher-led discussions; also feedback, re-teaching; also office hours and two-way communication with students, parents and/or guardians	live student-led discussions, small-group work, collaboration	live quizzes and polling; checking for understanding	live quizzes, tests, writing prompts and other tasks completed individually and unassisted for evaluation	on-demand, student-paced recorded read-alouds lessons, explanations, demonstrations, viewing simulations and videos, listening to audiobooks and podcasts, virtual fieldtrips	on-demand. student-paced work on learning software, online reading, word processing, audio and video recording, creating slide shows, digital art; also online student collaboration, partner reading, small-group work, peer review	on-demand, student-paced paper and pencil work, journaling, reading a printed book, math calculations, graphing, hands-on science, visual arts, physical activity	on-demand, student-paced quizzes and polling, either for teacher use (checking for understanding) or for student self-assessment	on-demand, student-paced quizzes, tests, writing prompts and other tasks completed individually and unassisted for evaluation

SCHEDULES

- **ALLOCATING TIME**

Distance Teaching and Learning Schedules – Allocating Time

By now, most teachers, schools and school districts have settled into fairly regular distance teaching and learning schedules, ideally after consultation and negotiation with teachers, unions and other stakeholders. Still, after several months of distance teaching, it may be worth it to reflect on those schedules and consider adjusting them as necessary to meet student, family, and teacher needs. As mentioned earlier, many administrators and school districts have over-emphasized the role of live, synchronous instruction at the expense of other important practices like student interaction and quality asynchronous activities. An effective and engaging instruction day should include a balance of different instructional practices, synchronous and asynchronous, teacher-directed and student-led, online and offline.

Table 2 below includes suggested time allocations for different distance teaching and learning practices. Not all practices described in this section are shown in the table. The "big five" practices are, but synchronous small-group and individual instruction and the various assessment practices are not. Synchronous small-group and individual instruction should usually take place either as virtual center rotations while other students are doing synchronous group work or as tutoring outside the regular instructional day during teachers' office hours. Formative assessment, both synchronous and asynchronous, shouldn't usually be its own discreet activity and will occur most often during teacher-led instruction or while students work. Formal comprehensive assessment will require a dedication of time, but it shouldn't be happening so often that it needs its own time slot, and when it does occur, just as in a traditional in-person classroom, one would expect it to replace of a certain amount of instruction on that day.

The numbers in Table 2 represents suggested ranges of minutes to spend on each instructional practice on a typical day. These suggested ranges reflect the relative importance of each practice compared to other practices and take into account students' developmental levels and ability to work independently. Daily screen time was also a consideration, as was striking a balance between online and offline work. These

THE "BIG FIVE" DISTANCE PRACTICES

ONE: synchronous whole-group instruction
TWO: synchronous application and collaboration activities
THREE: asynchronous instruction
FOUR: asynchronous online application activities
FIVE: asynchronous offline application activities

suggested ranges are meant to provide teachers with guidance and are not intended to be prescriptive; the needs of a particular class and the professional judgement of that class' teacher should always determine the actual time spent on particular practices. Likewise, few days are "typical" these days, and while predictable schedules can be helpful for students, teachers must always have the flexibility to adjust their schedules as needed in response to students' needs. Finally, these ranges were developed to be consistent with CDE guidance on distance instruction and on synchronous and asynchronous teaching and learning times.

Table 2 – Suggested Time Allocations for Distance Teaching and Learning Practices

grade span	SYNCHRONOUS		ASYNCHRONOUS			minimum instructional day
	online	online	online	online	offline	
	instruction	application	instruction	application	application	
	whole-group instruction	classwork activities: practice, application, interaction, collaboration	whole-group and/or small-group/ individual instruction	classwork activities: practice, application, interaction, collaboration	classwork activities: practice, application	
TK-K	30-60 min.	15-30 min.	15-30 min.	30-60 min.	30-60 min.	180 min.
1-3	30-60 min.	15-30 min.	15-30 min.	60-90 min.	60-90 min.	230 min.
4-5	30-60 min.	15-45 min.	15-45 min.	60-90 min.	60-90 min.	240 min.
6-8	60-90 min.	30-60 min.	30-60 min.	60-90 min.	60-90 min.	240 min.
9-12	60-90 min.	30-60 min.	30-60 min.	60-90 min.	60-90 min.	240 min.

The next table (Table 2.5) includes one sample configuration of minutes and instructional practices for each grade span as examples of well-rounded, engaging and rigorous student instructional days. Again, these sample schedules are not expected to work for every teacher, every class, or every student every day; they are meant to show one way that different needs – the need for direct instruction on skills and content, the need for students to have time to apply and practice learning, the need for students to interact and collaborate with peers, etc. – could be met. Regardless of the specific configuration of minutes, some time should be dedicated to each of the "big five" practices almost every day.

Table 2.5 – Sample Configurations of Minutes for Distance Teaching and Learning Practices

grade span	SYNCHRONOUS		ASYNCHRONOUS			total minutes
	online	online	online	online	offline	
	instruction	application	instruction	application	application	
	whole-group instruction	classwork activities: practice, application, interaction, collaboration	whole-group and/or small-group/ individual instruction	classwork activities: practice, application, interaction, collaboration	classwork activities: practice, application	
TK-K	60 min.	15 min.	15 min.	30 min.	60 min.	180 min.
1-3	60 min.	30 min.	20 min.	60 min.	60 min.	230 min.
4-5	60 min.	30 min.	30 min.	60 min.	60 min.	240 min.
6-8	60 min.	45 min.	45 min.	60 min.	60 min.	270 min.[3]
9-12	60 min.	60 min.	60 min.	60 min.	60 min.	300 min.[3]

[3] Total minutes extending beyond the state's minimum instructional day requirements reflect students' increasing ability to do asynchronous "homework" outside the school day.

Here, charts shows the relative proportion of minutes devoted to each instructional practice in the sample configurations in Table 2.5 and how they shift across grade spans. Live, teacher-led synchronous instruction and offline asynchronous application activities are important at all grade levels, but as a portion of students' day, older students are able to do more independent online and asynchronous work, and peer interaction and student-led collaboration during synchronous time become increasingly important.

TK-K
180 minutes total

- Synchronous Instruction 60
- Asynchronous Application, Offline 60
- Synchronous Application 15
- Asynchronous Instruction 15
- Asynchronous Application, Online 30

Grades 1-3
230 minutes total

- Synchronous Instruction 60
- Asynchronous Application, Offline 60
- Synchronous Application 30
- Asynchronous Instruction 20
- Asynchronous Application, Online 60

Grades 4-5
240 minutes total

- Synchronous Instruction 60
- Asynchronous Application, Offline 60
- Synchronous Application 30
- Asynchronous Instruction 30
- Asynchronous Application, Online 60

Grades 6-8
270 minutes total

- Synchronous Instruction 60
- Asynchronous Application, Offline 60
- Synchronous Application 45
- Asynchronous Instruction 45
- Asynchronous Application, Online 60

Grades 9-12
300 minutes total

- Synchronous Instruction 60
- Asynchronous Application, Offline 60
- Synchronous Application 60
- Asynchronous Instruction 60
- Asynchronous Application, Online 60

Other Considerations for Distance Teaching and Learning

Chunking

One important consideration when discussing instructional minutes and instructional practices is students' attention span. For example, just because 30-60 minutes of synchronous whole-group instruction per day is suggested for grades 1-3, that should in no way be understood as a recommendation for teachers to deliver a 60-minute block of instruction to first graders. In a traditional in-person classroom, students do better when instruction and other activities are chunked into small-to-medium lengths; this is even more true in a distance teaching and learning setting. "60 minutes of synchronous whole-group instruction" could *and should* be thought of as three 20-minute chunks, or four 15-minute chunks, or even 30 minutes on one topic and 10 minutes on three quicker topics, all spread out through the instructional day. Length of time spent on any practice or activity will vary greatly depending on the complexity of the topic and age/attention span of the students. (And remember the suggestion from above – consider using pre-recorded videos made available to students asynchronously for direct instruction so students can control the flow of information and do their own chunking.)

Transitions

A counterpoint to consider when planning smaller instructional chunks is transitions, which can be trouble spots for teachers and students, even in person, and can be particularly challenging in a distance teaching and learning setting. Switching between synchronous and asynchronous activities, in particular, probably means students are logging out of whatever video conferencing platform is being used and needing to log back in at a later time. That may be fine for older students, but younger students and students with lots of distractions at home may find multiple log-out/log-ins challenging and teachers may be faced with late or missing students. It is better to plan blocks and switch activities *within* synchronous instructional practices as much as possible – maybe a short live mini-lesson followed by students practicing with a partner, followed by a Quizlet activity to check for understanding, a quick no-log-out bathroom and stretch break (cameras and mics off and on are a lot easier for students to manage than actually logging out and logging back in), another mini-lesson on another topic, more student collaboration, more formative assessment, etc., and then logging out for the day. Middle- and high-school students may need to log in to and out of each class, but limiting younger students' need to log in/log out of synchronous activities to once or twice a day will reduce problems.

Screentime

A final consideration when planning a well-rounded, engaging and rigorous instructional day is screentime. Everyone is aware of the recommendations from multiple pediatric medical organizations and children's mental health groups to limit children's screentime to from almost zero for young children to up to a few hours a day for older children and teens. These recommendations were mostly published prior to COVID-19 and the onset of distance teaching and learning, so they focus more on screentime in the form of social media, entertainment, distraction and some maybe some "educational software" than on screentime in the form of communication and structured interaction with adults and peers. Still, these recommendations serve as reminder to us that online distance teaching and learning involves A LOT of screentime, more than many students are used to, and teachers, administrators and other adults should keep this in mind when developing schedules and expectations for students. In addition to striking a balance between synchronous and asynchronous online instructional practices, the sample schedules provided in this document also strive to provide students with a healthy amount offline time – time to read a book, or write, or draw, or cook, or exercise. This is essential for students with lots of energy and for younger students who need to develop fine motors skills, so offline activities make up a larger portion to the suggested instructional day of younger students. Still, offline activities remain important through high school and beyond and need to remain part of every student's daily routine.

HYBRID TEACHING AND LEARNING

DISCLAIMER:

While the focus of the next section is on hybrid instructional practices and considerations for developing hybrid schedules, let us be absolutely clear – **no one should plan on returning students and staff to school campuses for any reason until it is absolutely safe to do so**. In the meantime, we believe it is worthwhile to have ongoing discussions with teachers, unions, and other stakeholders to begin planning and preparation for the eventuality of hybrid instruction and a safe, phased-in return to in-person instruction long before schools are actually able to reopen.

HYBRID TEACHING AND LEARNING

As schools and school districts consider bringing small cohorts of high-need students or even their full student bodies back into hybrid[4] settings that include both in-person instruction and continued distance teaching and learning, it is worthwhile to revisit the instructional practices identified in the first half of this document and consider their application in a hybrid program. But first, another look at relevant California EdCode and state guidance on hybrid instruction. SB-98, the education omnibus budget trailer bill, specifies a minimum number of instructional minutes for all students based on grade level for the 2020-2021 school year:

- 180 instructional minutes per day for students in transitional kindergarten or kindergarten;
- 230 instructional minutes per day for students in grades 1 to 3; and
- 240 instructional minutes per day for students in grades 4 to 12[5].

This minimum number of instructional minutes applies to the student school day regardless of whether students are receiving instruction through a distance program, a hybrid program or an in-person program.

Regarding hybrid instruction, specifically, SB-98 says:

For a combined day of instruction delivered through both in-person instruction and distance learning, time scheduled under the immediate supervision of an employee of the local educational agency who possesses a valid certification document can be combined with assignments made under the general supervision of an employee of the local educational agency who possesses a valid certification document as registered by law to meet the equivalent of a minimum day of instruction.

In other words, student time spent in an in-person setting should be added to time spent doing distance learning to arrive at the minimum number of instructional minutes. In its guidance on returning small cohorts of students to schools in person in counties where the COVID-19 threat level is still designated as "widespread" (purple), the California Department of Public Health (CDPH) goes further, stating that the very purpose of bringing small groups of students back to school in person is to provide "limited instruction, targeted support services, *and facilitation of distance learning*…" [emphasis added] Hybrid teaching and learning is not intended by the state to be 180 or 230 or 240 minutes of in-person instruction, or worse, 180 or 230 or 240 minutes of in-person instruction followed by additional distance teaching and learning; it is meant to be 180 or 230 or 240 minutes of total instruction per day, made up of safe and reasonable amounts of both in-person and distance teaching and learning

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[4] A brief discussion of the term "hybrid instruction" and the related term, "blended instruction" – Reviewing the existing literature on the subject, there is no consensus on whether the two terms mean exactly the same thing or something slightly different. Some sources position blended instruction as form of hybrid instruction, while others see hybrid instruction as a specific kind of blended instruction. The Colorado Department of Education, for example, refers to hybrid learning as a blended program where students have a degree of choice over whether they will attend classes in person or synchronously online, depending on their needs. Here in California, the CDE tends to use the term "blended" while Cal/OSHA and the CDPH tend to use the term "hybrid"; school districts use them both, as well as other terms such as "distance learning plus," "flex" or even "hyflex." In this document, we will use the two terms to mean the same thing and primarily refer to the mix of online and in-person instruction as hybrid teaching and learning or as hybrid instruction.

[5] Or 180 instructional minutes per day for certain high school students co-enrolled in community college, California State University or University of California courses, or who attend a continuation high school.

In-Person Teaching and Learning

Live, in-person instruction is the original form of "synchronous" teaching and learning, so as in-person instruction gradually resumes, teachers will have two modes of synchronous teaching and learning available to them – in-person and online – and should consider which is more appropriate for their particular students and objectives. A well-balanced hybrid program should include both.

For the purpose of this overview, we have maintained the five broad categories used to describe synchronous online teaching and learning practices and applied them to in-person teaching and learning practice as well.

ONE	TWO	THREE	FOUR	FIVE
Live Whole-Group Instruction	Live Small-Group or Individual Instruction	Live Learning Application Activities	Live Formative Assessment	Live Comprehensive Assessment

1. In-Person Whole-Group Instruction

Whole-group instruction, particularly of young children, was never well suited to distance teaching and learning. Short, active lessons could mitigate this to some extent, but engaging an entire class of students remotely will always be challenging. Therefore, whole-group instruction is one of the first practices teachers in a hybrid setting should consider shifting to the in-person portion of their day. Whole-group instruction will still present challenges, however, even in person. Classrooms will be under strict COVID-safety precautions and students and teachers will be expected to remain at least 6' apart. This might seem to limit students to sitting in their seats while teachers lecture from the front of the classroom, but teachers can incorporate active participation, hands-on activities, movement and creative seating arrangements into their lessons.

Note that, while in-person whole-group instruction may often be more effective than online whole-group instruction, there is still a place for well-though-out live online whole-group teaching and learning in a hybrid setting. For example, after reviewing student work, a teacher might notice that there is something students just didn't get. She could wait until their next in-person time together or she could use a bit of scheduled online time in the afternoon to quickly review and re-teach the skill. Likewise, if classes are split into two cohorts to maintain smaller in-person class sizes, synchronous online whole-group time could be an opportunity to bring the whole class together for community building and other shared experiences. While in-person whole-group instruction will probably replace most online whole-group instruction, it does not render online whole-group instruction obsolete and teachers should remember that they still have this tool when needed.

2. In-Person Small-Group or Individual Instruction

In-person small-group and individual instruction may prove to be an even greater step forward than in-person whole-group instruction. Distance learning has been challenging for all students to a degree, but for some students with disabilities, some English learners, and students whose home environments aren't conducive to at-home study, it has been a Herculean labor. There will be challenges with maintaining physical distance or with needing to teach around barriers or extra personal protective equipment when distancing isn't possible, but in-person small-group and individual instruction offers the opportunity to work directly with struggling students and students for whom distance learning has not been as effective.

Similar to online whole-group instruction above, in-person small-group and individual instruction may be preferred to online small-group and individual instruction, but teachers should not overlook the continuing utility of meeting with small groups of students or even single students online to provide guidance and support.

3. In-Person Learning Application Activities

While teachers may be concerned about learning loss and pacing, what most students want right now is to see their friends again. What was important online – student interaction and collaboration – becomes an essential component of any hybrid program. Teachers may sometimes ask students to do some practice and application work by themselves, and it will be a challenge to figure out safe ways for students to interact while maintaining physical distance or through masks and transparent barriers, but no in-person time dedicated to students working together and collaborating on assignments, or even just socializing, will be wasted. Nine months of quarantine and social distancing has meant isolation for many students and the return to in-person learning will be an opportunity for them to be social again. Teachers can channel this energy into pair and group work (but they may need to be patient as students reacclimatize to school and catch up with their friends). If it proves too difficult for students to communicate verbally because of distances or masks and other barriers, they can use hand signals, response cards or dry erase surfaces that they hold up. If students have access to technology in the classroom (if all the tablets and laptops haven't been sent home), students can still use online apps like Google Docs and Google Slides to work collaboratively while maintaining distance in the classroom.

4. In-Person Formative Assessment

Teachers should be checking for understanding and assessing student learning throughout their lessons regardless of the learning setting, whether online or in-person. Returning to in-person instruction for part of the day allows teachers to draw on favorite pre-COVID formative assessment strategies like using equity sticks to call on a random sample of students or having the whole class respond at the same time using choral responses, hand signals, response cards or dry erase surfaces. Teachers can also circulate and observe students as they work, even if they are not physically collecting as many assignments as they would have before COVID-19. If students have access to technology in the classroom, teachers should consider using some of the same polling and quiz apps in the classroom that they have been using with students online; even in the classroom, these apps provide a great way to engage large numbers of students simultaneously and may provide teachers with the opportunity to tutor students who were never quite able to use the apps effectively on their own from home.

5. In-Person Comprehensive Assessment

Given the limited time teachers will have in person with students, time spent on assessments should be judiciously allocated. As discussed in the first section of this document, some forms of assessment are legitimately difficult to administer online, synchronously or asynchronously, and teachers may occasionally have to use some in-person time to give tests, but teachers should carefully consider the time-cost vs. information-return of any assessments they chose to administer in person and if they could collect the same information in another, more authentic way. Likewise, grade-levels and departments may want to reconsider any common assessments they normally administer to decide if they are really necessary and appropriate at this time.

Table 3 provides a summary of the in-person teaching and learning practices described above.

Table 3 – Summary of In-Person Teaching and Learning Practices

SYNCHRONOUS				
in-person	in-person	in-person	in-person	in-person
instruction whole-group instruction	instruction small-group/individual instruction	application classwork activities: practice, application, interaction, collaboration	assessment formative assessment	assessment comprehensive assessment
lectures, mini-lessons, explanations, demonstrations, modeling, teacher-led discussions, calendar time; also feedback, re-teaching	mini-lessons, explanations, demonstrations, modeling, teacher-led discussions; also feedback, re-teaching; also office hours and two-way communication with students, parents and/or guardians	student-led discussions, small-group work, collaboration	quizzes and polling; checking for understanding	quizzes, tests, writing prompts and other tasks completed individually and unassisted for evaluation

Asynchronous Teaching and Learning

In a hybrid or blended program, online teaching and learning should continue for at least some portion of the student day. Asynchronous practices in particular should still make up an important part of students' learning experience.

SIX	SEVEN	EIGHT	NINE	TEN
On-Demand Instruction (Whole-Group, Small-Group or Individual)	On-Demand Online Application Activities	On-Demand Offline Application Activities	On-Demand Formative Assessments	On-Demand Comprehensive Assessment

6. On-Demand Instruction (Whole-Group, Small-Group or Individual)

If teachers are trying to maximize student engagement during in-person class time (with short lessons and as much student interaction as possible), recorded lessons and informational videos that students can watch at home, at their own pace, remain an excellent way to provide direct instruction and frontload content prior to in-person classes.

7. On-Demand Online Application Activities

Just as in distance-only teaching and learning, independent online activities, whether part of a curriculum, an adaptive learning system or created by a teacher, continue to provide an opportunity for students to apply learning and practice skills at home. Teachers shouldn't plan on spending too much in-person class time with students practicing skills by themselves or having students sit at computers working on learning software. Teachers might *begin* practice activities in class to make sure students understand what to do, but students should be doing most solo practice and application work at home so teachers can reserve in-person time for activities that cannot be replicated at home like hands-on lessons, projects and group work.

8. On-Demand Offline Application Activities

With the advent of in-person learning, students will likely have more opportunities to engage in paper-and-pencil work and other hands-on, offline activities in the classroom, but the importance of assigning offline work for students to do at home remains. Students will have more access to textbooks and workbooks than they did when schools were closed, and they will probably have more access to art and science materials that they may not have had at home. Teachers should consider beginning art projects in person, in class, and sending the projects and materials home to finish. Teachers could even record a short set of video instructions so students and families can

review the instructions at home. Or teachers could give students the instructions and materials for simple science experiments to perform and observe at home – mix two ingredients, add something to water, leave something in the sunlight, plant a seed, etc. Again, teachers could record a short set of video instructions so students and families can review what to do at home, and students might be asked to record their observations using a video app like Flipgrid or Animoto.

9. On-Demand Formative Assessments

In addition to what they see while they work with students in person and online synchronously, teachers will continue to monitor asynchronous assignments because they can provide teachers with the insight necessary to know if the class is ready to move forward to the next lesson or if they need help before progressing. Teachers should consider promoting more self-assessment where possible, too, teaching student to not just look at self-quiz scores but to reflect on their own learning, asking themselves questions like "Do I understand this topic?" "Am I ready to move forward?" or "What do I need help understanding?" Students' answers to questions like these can then connect back to interactive activities where students demonstrate mastery by explaining a process to their peers. Those students who feel they need more help can then ask for additional guidance from classmates or a teacher.

10. On-Demand Comprehensive Assessment

Despite the temptation to shift back to in-person assessment once the hybrid program begins, teachers should try to maintain the gains they've made during distance teaching and learning toward richer, more authentic forms of assessment that require less direct supervision but provide a fuller, more nuanced picture of what students can do. Teachers should continue having students write responses, record explanations and demonstrate what they learned by building models or creating art or developing routines that synthesize different styles and techniques they've learned. Save in-person time for interaction and collaboration and continue using high-quality asynchronous assessments.

SCHEDULES

- **ALLOCATING TIME**
- **GUIDING PRINCIPLES FOR CREATING HYBRID SCHEDULES**
- **SAMPLE HYBRID SCHEDULES**

Hybrid Teaching and Learning Schedules I – Allocating Time

Table 4 provides suggested time allocations for different in-person and online teaching and learning practices. Again, not all practices described in this section are shown in the table. The "big five" practices from distance teaching and learning become the "big seven" with the addition of in-person whole group instruction and in-person application and collaboration activities. Small-group and individual instruction, be it in-person, synchronous online or asynchronous online, is still occurring as needed, and formative and comprehensive assessment are ongoing but don't need daily time dedicated to them.

The numbers in Table 4 represents suggested ranges of minutes to spend on each instructional practice on a typical day. These suggested ranges reflect the relative importance of each practice compared to other practices in a hybrid setting and take into account students' developmental levels and ability to work independently. Daily screen time was also a consideration, as was striking a balance between online, offline and in-person work. For elementary grades TK-5, Schedule A represents an in-person school day and Schedule B represents an online, at-home school day for those considering alternating between in-person and online, at-home days. All suggested ranges are meant to provide teachers with guidance and are not intended to be prescriptive; the needs of a particular class and the professional judgement of that class' teacher should always determine the actual time spent on particular practices. Likewise, few days are "typical" these days, and while predictable schedules can be helpful for students, teachers must always have the flexibility to adjust their schedules as needed in response to students' needs. Finally, these ranges were developed to be consistent with CDE guidance on in-person and distance instruction and on synchronous and asynchronous teaching and learning times.

THE "BIG SEVEN" HYBRID PRACTICES

ONE: in-person whole-group instruction
TWO: in-person application and collaboration activities
THREE: synchronous whole-group instruction
FOUR: synchronous application and collaboration activities
FIVE: asynchronous instruction
SIX: asynchronous online application activities
SEVEN: asynchronous offline application activities

Table 4 – Suggested Time Allocations for Hybrid Teaching and Learning Practices

grade span	SYNCHRONOUS		SYNCHRONOUS		ASYNCHRONOUS			minimum instructional day
	in-person	in-person	online	online	online	online	offline	
	instruction	application	instruction	application	instruction	application	application	
	whole-group instruction	classwork activities: practice, application, interaction, collaboration	whole-group instruction	classwork activities: practice, application, interaction, collaboration	whole-group and/or small-group/ individual instruction	classwork activities: practice, application, interaction, collaboration	classwork activities: practice, application	
TK-K A	60-90 min.	30-60 min.	0-30 min.	0-30 min.	0-15 min.	15-30 min.	30-60 min.	180 min.
TK-K B	---	---	30-60 min.	15-30 min.	15-30 min.	15-30 min.	30-60 min.	180 min.
1-3 A	60-90 min.	30-60 min.	0-30 min.	0-30 min.	0-30 min.	30-60 min.	30-60 min.	230 min.
1-3 B	---	---	30-60 min.	15-30 min.	15-30 min.	30-90 min.	30-90 min.	230 min.
4-5 A	60-90 min.	30-60 min.	0-30 min.	0-30 min.	0-30 min.	30-60 min.	30-60 min.	240 min.
4-5 B	---	---	30-60 min.	15-45 min.	15-45 min.	30-90 min.	30-90 min.	240 min.
6-8	30-90 min.	30-90 min.	60-90 min.	30-60 min.	30-60 min.	30-60 min.	30-60 min.	240 min.
9-12	30-90 min.	30-90 min.	60-90 min.	30-60 min.	30-60 min.	30-90 min.	30-90 min.	240 min.

The next table (Table 4.5) includes samples of configuration of minutes and instructional practices for each grade span as examples of well-rounded, engaging and rigorous student instructional days. Elementary grades TK-5 include three samples each where Schedules A and B represent an in-person school day and an online, at-home school day for a school that alternates between in-person and online, at-home days. Schedule C represents an in-person school day for a school where students report to campus in person every day. Again, these sample schedules are not expected to work for every teacher, every class, or every student every day; they are meant to show one way that different needs – the need to bring students back to school for in-person instruction, the need to the keep students and staff safe and healthy, the need for direct instruction on skills and content, the need for students to have time to apply and practice learning, the need for students to interact and collaborate with peers, etc. – could be met. Regardless of the specific configuration of minutes, some time should be dedicated to each of the "big seven" practices as close to daily as schedules and safety allow.

Table 4.5 – Sample Configurations of Minutes for Hybrid Teaching and Learning Practice
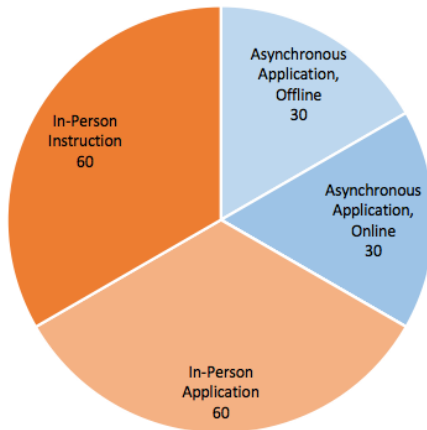
grade span	SYNCHRONOUS		SYNCHRONOUS		ASYNCHRONOUS			total minutes
	in-person	in-person	online	online	online	online	offline	
	instruction	application	instruction	application	instruction	application	application	
	whole-group instruction	classwork activities: practice, application, interaction, collaboration	whole-group instruction	classwork activities: practice, application, interaction, collaboration	whole-group and/or small-group/ individual instruction	classwork activities: practice, application, interaction, collaboration	classwork activities: practice, application	
TK-K A	60 min.	60 min.	0 min.	0 min.	0 min.	30 min.	30 min.	180 min.
TK-K B	0 min.	0 min.	60 min.	30 min.	15 min.	30 min.	45 min.	180 min.
TK-K C/D	60 min.	60 min.	0 min.	0 min.	0 min.	30 min.	30 min.	180 min.
1-3 A	60 min.	60 min.	30 min.	20 min.	0 min.	30 min.	30 min.	230 min.
1-3 B	0 min.	0 min.	60 min.	30 min.	20 min.	60 min.	60 min.	230 min.
1-3 C/D	60 min.	60 min.	0 min.	0 min.	20 min.	45 min.	45 min.	230 min.
4-5 A	60 min.	60 min.	30 min.	30 min.	0 min.	30 min.	30 min.	240 min.
4-5 B	0 min.	0 min.	60 min.	30 min.	30 min.	60 min.	60 min.	240 min.
4-5 C/D	60 min.	60 min.	0 min.	0 min.	20 min.	50 min.	50 min.	240 min.
6-8	60 min.	40 min.	60 min.	40 min.	40 min.	30 min.	30 min.	300 min.[6]
9-12	60 min.	40 min.	60 min.	40 min.	40 min.	60 min.	60 min.	360 min.[6]

[6] Total minutes extending beyond the state's minimum instructional day requirements reflect students' increasing ability to do asynchronous "homework" outside the school day.
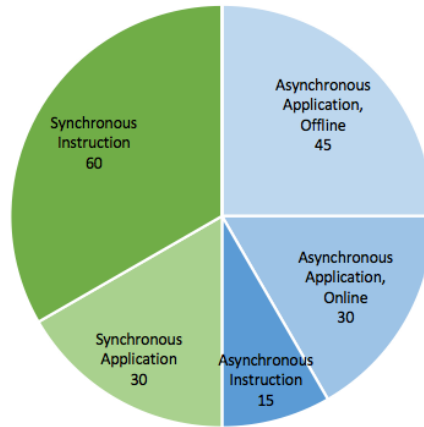
Here, charts show the relative proportion of minutes devoted to each instructional practice in the sample configurations in Table 4.5 and how they shift across grade spans. Online and offline asynchronous application activities remain important at all grade levels. Online synchronous instruction also remains important, but in-person instruction and in-person application and interaction activities become the predominant instructional practices for most students when available, especially younger students, allowing teachers to employ online instruction more judiciously and when it would benefit students the most.

TK-K A
180 minutes total

- Asynchronous Application, Offline 30
- In-Person Instruction 60
- Asynchronous Application, Online 30
- In-Person Application 60

TK-K B
180 minutes total

- Synchronous Instruction 60
- Asynchronous Application, Offline 45
- Asynchronous Application, Online 30
- Asynchronous Instruction 15
- Synchronous Application 30

TK-K C/D
180 minutes total

- Asynchronous Application, Offline 30
- In-Person Instruction 60
- Asynchronous Application, Online 30
- In-Person Application 60

Grades 1-3 A
230 minutes total

- Asynchronous Application, Offline 30
- In-Person Instruction 60
- Asynchronous Application, Online 30
- Synchronous Application 20
- In-Person Application 60
- Synchronous Instruction 30
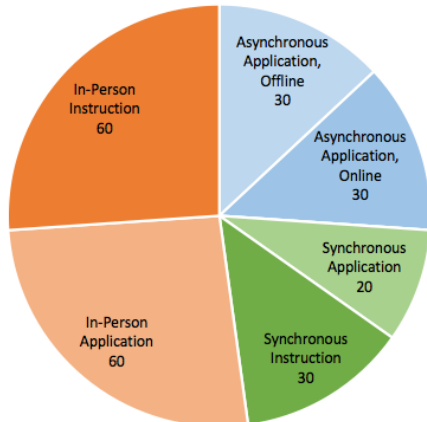
Grades 1-3 B
230 minutes total

- Synchronous Instruction 60
- Asynchronous Application, Offline 60
- Synchronous Application 30
- Asynchronous Instruction 20
- Asynchronous Application, Online 60
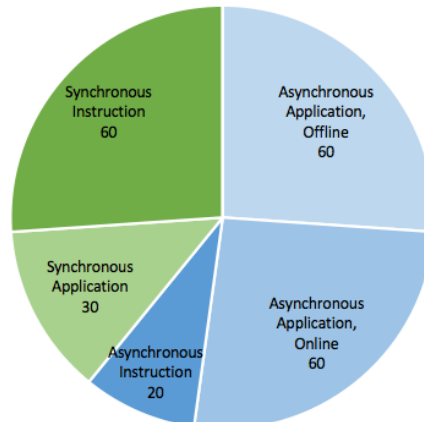
Grades 1-3 C/D
230 minutes total

- In-Person Instruction 60
- Asynchronous Application, Offline 45
- Asynchronous Application, Online 45
- In-Person Application 60
- Asynchronous Instruction 20
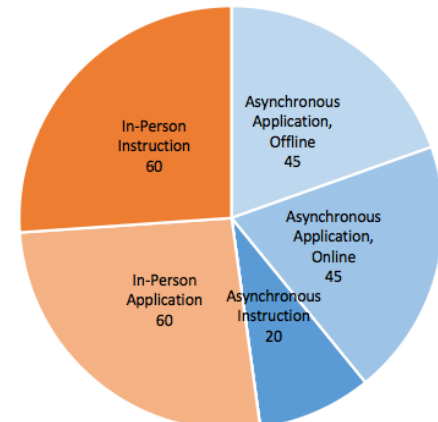
Grades 4-5 A
240 minutes total

In-Person Instruction 60

Asynchronous Application, Offline 30

Asynchronous Application, Online 30

In-Person Application 60

Synchronous Application 30

Synchronous Instruction 30
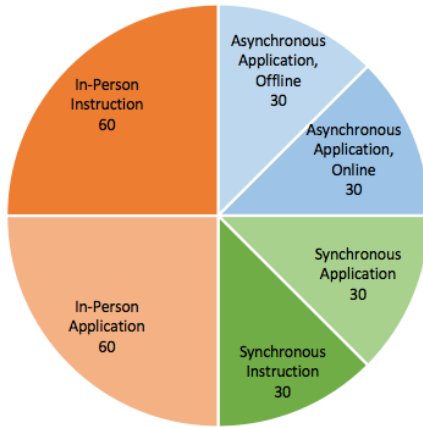
Grades 4-5 B
240 minutes total

Synchronous Instruction 60

Asynchronous Application, Offline 60

Synchronous Application 30

Asynchronous Application, Online 60

Asynchronous Instruction 30
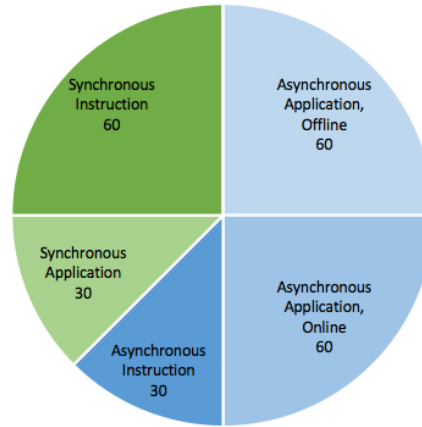
Grades 4-5 C/D
240 minutes total

In-Person Instruction 60

Asynchronous Application, Offline 50

In-Person Application 60

Asynchronous Application, Online 50

Asynchronous Instruction 20
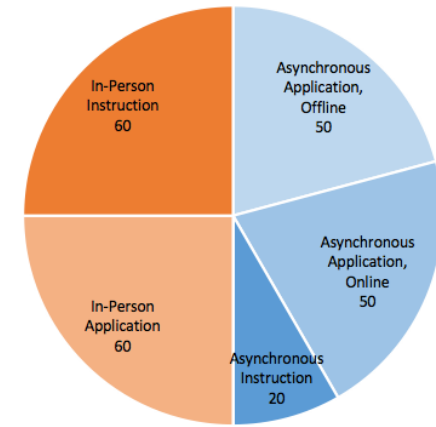
Grades 6-8
300 minutes total

In-Person Instruction 60

Asynchronous Application, Offline 30

Asynchronous Application, Online 30

In-Person Application 40

Asynchronous Instruction 40

Synchronous Instruction 60

Synchronous Application 40
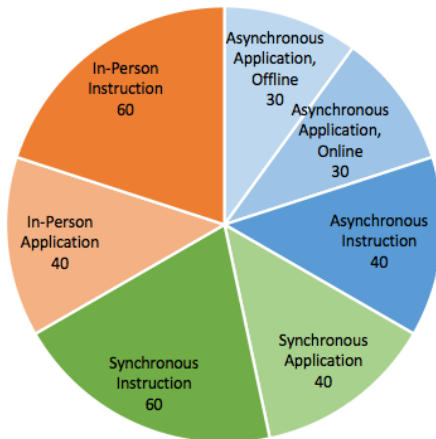
Grades 9-12
360 minutes total

In-Person Instruction 60

Asynchronous Application, Offline 60

In-Person Application 40

Asynchronous Application, Online 60

Synchronous Instruction 60

Asynchronous Instruction 40

Synchronous Application 40
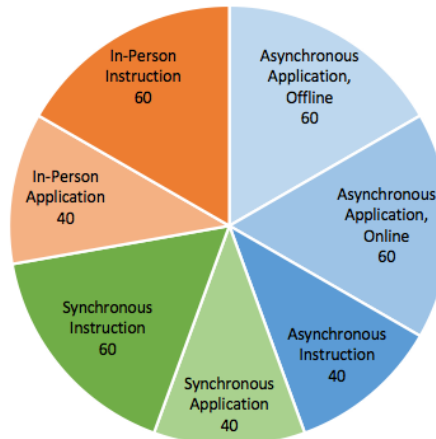
Hybrid Teaching and Learning Schedules II – Guiding Principles for Creating Hybrid Schedules

To an even greater extent than with distance teaching and learning, developing safe and effective hybrid teaching and learning schedules requires stakeholder input and high levels of coordination between parents, teachers, unions, and school and district administrators.

(Note that some local unions and school districts may have already negotiated to MOUs that address the concrete operational aspects of hybrid schedules. Please check to determine if this is true in your school district as local MOUs may provide greater specificity than either the guidelines or sample schedules that follow.)

Students and parents have academic and social-emotional needs and health and safety concerns that must be considered. Schools and districts need to deal with the logistics of bringing students and staff back onto campuses and of maintaining health and safety protocols to avoid the spread of COVID-19. Teachers know better than anyone else the needs and best solutions for their students but also worry about their own health and risks to their families of returning to in-person instruction. No single stakeholder group should make decisions about returning to school in isolation from other stakeholder groups, and if there were ever a time for collaborative decision making for the benefit of all those involved, this is it. That being said, every community will arrive at different solutions to the challenge of establishing hybrid programs because every community has different needs and other factors to consider. It would be impossible to suggest a universal schedule for hybrid teaching and learning because that schedule could never satisfy the needs of schools and communities in rural, suburban *and* urban communities, of large schools *and* small schools, of schools with large numbers of English learners *and* schools with relatively few, and so on. What we can do, however, is offer a set of guiding principles that parents, teachers, unions, and school and district administrators should consider as they develop their own local plans and hybrid teaching and learning schedules.

1. *Hybrid schedules should adhere to state guidelines on minimum instructional minutes.*

   The state has given permission for schools to shorten the instructional day for a number of reasons that support students,

families and schools. This flexibility will be more important than ever once schools begin a gradual return to in-person instruction in order to minimize student, teacher and school staff contact and infection risks. There is no need to rush to return to a full-length, pre-COVID instructional day at this point in the pandemic.

2. *For students in grades 1 through 5, the instructional day should be about half in-person and half continued online instruction (including both synchronous and asynchronous teaching and learning).*

3. *For students in transitional kindergarten (TK) and kindergarten (K), the instructional day should be more than half in-person with modest amounts of continued online instruction (mostly asynchronous practice and application activities).*

4. *For students in grades 6 through 12, the instructional day should remain predominantly online with meaningful in-person opportunities each day.*

Bringing most elementary school students back for in-person teaching and learning for half the minimum instructional day (approximately 2 hours) is a reasonable first step back that provides students with important in-person experience and gives schools a chance to fully implement and refine their health and safety protocols while still providing students with robust distance learning experiences and maintaining readiness for possible future quarantines. TK and K students are less independent and more heavily dependent on teacher direction, so, to the extent possible, their online experience should be reduced in favor of more in-person

teaching and learning. Middle and high school students (grades 6-12), on the other hand, are (usually) more independent and online instruction supports their multi-period schedules, so continued online teaching and learning is appropriate, but middle and high school students benefit from in-person experiences and social interaction, too, and should receive some in-person teaching and learning every day if it is safe to do so.

5. *Elementary classes (grades TK-5) should be divided into cohorts of no more than 14 students each (fewer if classrooms cannot physically accommodate 14 students, a teacher and protective equipment at safe social distances). These cohorts must be stable and avoid interaction with other cohorts.*

6. *Middle and high school classes (grades 6-12) should be divided into cohorts of no more than 14 students each (fewer if classrooms cannot physically accommodate 14 students, a teacher and protective equipment at safe social distances). These cohorts should be as stable as possible and avoid interaction with other cohorts. This is may be difficult because of students' varying schedules and schools should consider temporarily scheduling cohorts of students together for all classes to minimize intermingling and exposure risks.*

The California Department of Public Health (CDPH) guidelines for small cohorts only apply to bringing small groups of high-need students back to campuses for limited in-person instruction while a county is in the purple tier for widespread risk of COVID-19 infection; once a county is out of the purple tier (for two weeks), there are no legal restrictions against bringing back all students for in-person instruction. However, schools are not *required* to bring back all students at once and, whether through negotiation with unions or consultation with stakeholder groups (or both), districts will develop their own plans for safely returning students and staff to campuses for in-person instruction. The CDPH guidelines – even though no longer legally binding – continue to provide a good starting point for planning what in-person classes could and should look like once they

resume, including the importance of smaller class sizes, stable cohorts, and the continued need for health and safety protocols, masks and distancing in classroom spaces.

As modeled in the CDPH guidelines, most in-person classes should, ideally, be split into two cohorts, an A group and a B group, with no more than 14 students each. Classes with more than 28 students could be divided into larger cohorts with more than 14 students each, but this should be avoided if possible. It would be better to either split large classes into three cohorts or for school administrators to reconfigure classes so that classes no longer have more that 28 students. (This recommendation is based on safety and good pedagogy but is not required by law; unions should attempt to negotiate in-person class and cohort sizes as close to these numbers as possible but may not be able to achieve these exact sizes.) Likewise, because the original CDPH guidelines prohibited students from moving between cohorts for safety reasons, students with IEPs who spend part of the day in a given cohort should be considered part of that cohort and should count toward that cohort's maximum size. They may receive individualized services outside the cohort but should not also be part of another cohort. Finally, if students with IEPs bring additional adults into the classroom, like a special education co-teacher or one-on-one aides, remember that CDPH guidelines allowed 2 adults with 14 students, and then any additional adults beyond 2 meant reducing the number of students; there was a 16-*person* maximum on all cohorts. (Again, these are recommendations, not requirements, but unions should take these into account when negotiating in-person class size and cohort language.)

Regarding middle and high school students, tracking students and locking them into particular groups or schedules just because they have an intervention class or an honors class is generally not a good idea – it limits students' opportunities and can lead to classes that are challenging to teach. However, when bringing middle and high school students back to campus for in-person instruction while the COVID-19 pandemic continues, health and safety concerns may

temporarily override other concerns; the chances of exposure to COVID-19 are greatly reduced if a group of students forms a stable cohort and travels from one class to the next together without remixing every period. This tracking can be somewhat mitigated if schools offer some online-only elective classes which students could take regardless of their in-person cohort.

7. *Ideally, teachers (TK-12) would not interact with more than one cohort of students per day. At most, teachers should not interact with more than two cohorts (of the same class) in the same day.*

8. *All classrooms must be deep cleaned according to state, county and local health guidelines between each cohort of students physically present in those classrooms. If two cohorts of students will use the same classroom on the same day (such as an AM group and a PM group), sufficient time must be built into the schedule to allow for all such classrooms to be fully cleaned between each cohort.*

Depending on schools' and districts' ability to actually enact health and safety protocols, it may not even be possible to bring in two cohorts of students per day. One cohort of students per day would probably mean about half the total student population on campus each day. Does the school have the ability to do that many health screenings and temperature checks? Does it have enough pathways to bring that many students through the gates while maintaining safe social distances and getting them to classrooms? How will breakfasts and/or lunches be handled? Bathrooms? What will cleaning procedures be while students are on campus and after they've left? If a school can't answer these questions, they shouldn't be bringing any students back for in-person teaching and learning. If they can answer them but haven't actually tried their plans yet, then they probably aren't ready for more than one cohort per day. If a school is exceptionally well managed and has had some experience with waivers or small cohorts of students already on campus, they might be ready to move to the next phase and try two cohorts per day, meaning that most of the total student population would be on campus each day, either in a morning shift or an afternoon shift.

That's a big step, and most schools will get there *eventually*, but it is not the right place for most schools to begin in-person instruction.

9. *If schools adopt a two-cohort model with alternating in-person days, students' non-in-person days (i.e., their online, at-home days) should be structured similarly to their prior online distance teaching and learning days with regard to proportions of instructional practices, with a bit less time devoted to online instruction and independent online activities.*

In-person teaching and learning, even if only for a few days each week, allows teachers to rebalance their schedules and partially shift away from some of the more challenging aspects of distance teaching and learning, such as whole-group online instruction and students having a lot of online work to complete independently. Still, "less" does not mean "none," and there will still be times when each of the online distance teaching and learning practices will be the most effective tools teachers can employ, even after students have resumed in-person learning.

10. *Avoid concurrent in-person and online instruction.*

There will be a whole section later in this document about why concurrent hybrid schedules are terrible for students and teachers. For this list of principles for developing safe and effective hybrid schedules, suffice it to say that simultaneously teaching students in-person and online via streaming video, and doing it well, is almost impossible without extensive training (which most districts will not provide) and a substantial investment in technology (which most districts cannot provide), and even then it is most appropriate for college-age or very independent, self-motivated high-school-age students, and is not appropriate for elementary and middle school students who are stuck online because of health concerns. More importantly, with creative scheduling and reasonable in-person time expectations, concurrent hybrid schedules are completely unnecessary.

Hybrid Teaching and Learning Schedules III – Sample Hybrid Schedules

The purpose of this document is not to try to tell readers at what time different subjects should be taught or how many minutes of math to teach every day. However, because we have offered suggestions as to how much time teachers could dedicate to different instructional practices, some readers will ask for advice regarding how those times could be configured in an instructional day. There are also many teachers and schools working on developing hybrid schedules and looking for good examples. The following are sample hybrid schedules created according to the principles discussed above. They are not intended to represent the only way to configure safe and effective hybrid schedules, and they might not be appropriate for every school in every community. There are certainly other good hybrid schedules being developed or even already in place in schools across the country, but teachers and schools are encouraged to consider these sample schedules, reflect on how they strive to satisfy the developmental, pedagogical and safety needs of students and teachers through the principles described above, and apply any insights to their own work developing hybrid schedules that meet the needs of their students, teachers, schools and communities.

Sample Hybrid Schedule #1 – Grades 1-5

	MON		TUES		WEDS		THURS		FRI	
	A	B	A	B	A	B	A	B	A	B
8-9	in-person	async	in-person	async	online sync		async	in-person	async	in-person
9-10	in-person	async	in-person	async	online sync		async	in-person	async	in-person
10-11	work time		work time		work time		work time		work time	
11-12	lunch		lunch		lunch		lunch		lunch	
12-1	async	sm. group rotations: online sync sm. group/ async	async	sm. group rotations: online sync sm. group/ async	async		sm. group rotations: online sync sm. group/ async	async	sm. group rotations: online sync sm. group/ async	async
1-2	online sync		online sync		async		online sync		online sync	
2-3	work time		work time		work time		work time		work time	

Sample Hybrid Schedule #1

- Two student cohorts, A and B, scheduled AA/BB in person with Wednesdays as a teacher planning/staff development day. (Could also be scheduled as AB/AB, but that would require more frequent deep cleanings).

- Approximately 4 hours of structured instructional time per day, with 2 hours of in-person, 1 hour of online synchronous and 1 hour of asynchronous (which could be either online or offline) on an in-person day, 1-2 hours of online synchronous and 2-3 hours of asynchronous on an at-home day, and 2 of hours online synchronous and 2 of hours asynchronous on Wednesdays. (Note that, unless asynchronous assignments are strictly timed, they could actually be completed almost any time during the day.)

- Counting 2 hours of unstructured "work time," students' school day could be as long as 6 hours if desired.

- Includes live interaction with teacher and peers every day.

- No concurrent sessions with in-person and online at the same time.

- Two 1-hours blocks of time each day for teacher planning, collaboration and office hours, and a 3-hour block for planning and staff development on Wednesdays.

- Possible variations include moving whole-class online synchronous time to 12-1 and small group rotations to 1-2 so whole-class online synchronous time could serve as a kick-off for small group rotations and asynchronous work. Or interchanging the Wednesday morning synchronous time with the Wednesday afternoon asynchronous time to create a more standardized asynchronous-in-the-morning, synchronous-in-the-afternoon schedule across the week.

With 4 hours of in-person instruction per week, *Sample Hybrid Schedule #1* would be a basic, introductory schedule suitable for schools just beginning the process of returning to school in-person.

Sample Hybrid Schedule #2 – Grades TK-K

	MON		TUES		WEDS		THURS		FRI	
	A	B	A	B	A	B	A	B	A	B
8-9	in-person	work time	in-person	work time	online sync		work time	in-person	work time	in-person
9-10	in-person	async	in-person	async	online sync		async	in-person	async	in-person
10-11	work time		work time		work time		work time		work time	
11-12	lunch		lunch		lunch		lunch		lunch	
12-1	work time	online sync	work time	online sync	work time		online sync	work time	online sync	work time
1-2	async	sm. group rotations: online sync sm. group/ async	async	sm. group rotations: online sync sm. group/ async	async		sm. group rotations: online sync sm. group/ async	async	sm. group rotations: online sync sm. group/ async	async
2-3	work time		work time		work time		work time		work time	

Similar to *Sample Hybrid Schedule #1*, except for TK and K classes.

- Two student cohorts, A and B, scheduled AA/BB in person with Wednesdays as a teacher planning/staff development day. (Could also be scheduled as AB/AB, but that would require more frequent deep cleanings).

- Approximately 3 hours of structured instructional time per day, with 2 hours of in-person and 1 hour of asynchronous (which could be either online or offline) on an in-person day, 1-2 of hours online synchronous and 1-2 hours of asynchronous on an at-home day, and 2 of hours online synchronous and 1 hour of asynchronous on Wednesdays. (Again, unless asynchronous assignments are strictly timed, they could be completed almost any time during the day.)

- Counting 3 hours of unstructured "work time," students' school day could be as long as 6 hours if desired.

- Includes live interaction with teacher and peers every day.

- No concurrent sessions with in-person and online at the same time.

- Two 1-hours blocks of time each day for teacher planning, collaboration and office hours, and a 3-hour block for planning and staff development on Wednesdays.

- Possible variations include moving Cohort B's online synchronous time to 8-9 and Cohort A's in-person time to 9-10 and 10-11 so Cohort B's online synchronous time could serve as a morning meeting and kick-off for the day's asynchronous work. Or interchanging the Wednesday morning synchronous time with the Wednesday afternoon asynchronous time to create a more standardized asynchronous-in-the-morning, synchronous-in-the-afternoon schedule across the week.

With 4 hours of in-person instruction per week, *Sample Hybrid Schedule #2* would be a basic, introductory schedule suitable for schools just beginning the process of returning to school in-person.

Sample Hybrid Schedule #3 – Grades 1-5

	MON		TUES		WEDS		THURS		FRI	
	C	D	C	D	C	D	C	D	C	D
8-9	in-person	async	in-person	async	online sync		in-person	async	in-person	async
9-10	in-person	async	in-person	async	online sync		in-person	async	in-person	async
10-11	work time		work time		work time		work time		work time	
11-12	lunch		lunch		lunch		lunch		lunch	
12-1	work time		work time		work time		work time		work time	
1-2	async	in-person	async	in-person	async		async	in-person	async	in-person
2-3	async	in-person	async	in-person	async		async	in-person	async	in-person

Based on *Sample Hybrid Schedule #1*, but more emphasis on getting students onto campus almost every day.

- Two student cohorts, A and B, scheduled for daily in-person with Wednesdays as a teacher planning/staff development day.

- Approximately 4 hours of structured instructional time per day, with 2 hours of in-person and 2 hours of asynchronous (which could be either online or offline) on Monday, Tuesday, Thursday and Friday, and 2 hours of whole-group online synchronous and 2 hours of asynchronous on Wednesdays. Because more teacher time would be spent on in-person teaching, teachers would be unable to do much whole-group online synchronous teaching (except for Wednesdays), meaning almost all online teaching and learning would be asynchronous. (And again, unless asynchronous assignments are strictly timed, they could be completed almost any time during the day.)

- Counting 2 hours of unstructured "work time," students' school day could be as long as 6 hours if desired.

- Includes live interaction with teacher and peers every day.

- No concurrent sessions with in-person and online at the same time.

- Scheduling student "work time" immediately before and after lunch provides teachers with 2 1-hours blocks of time each day for planning, collaboration and office hours and also creates a 3-hour block of time daily during which all classrooms could be cleaned before the afternoon cohorts arrive. (And there would be 3-hour afternoon block for planning and staff development on Wednesdays.)

With 8 hours of in-person instruction per week, *Sample Hybrid Schedule #3* would be a more advanced schedule suitable for schools that have already experienced success implementing health and safety protocols and piloting small groups of students on campus.

Sample Hybrid Schedule #4 – Grades TK-K

	MON		TUES		WEDS		THURS		FRI	
	C	D	C	D	C	D	C	D	C	D
8-9	in-person	work time	in-person	work time	online sync		in-person	work time	in-person	work time
9-10	in-person	async	in-person	async	online sync		in-person	async	in-person	async
10-11	work time		work time		work time		work time		work time	
11-12	lunch		lunch		lunch		lunch		lunch	
12-1	work time		work time		work time		work time		work time	
1-2	async	in-person	async	in-person	async		async	in-person	async	in-person
2-3	work time	in-person	work time	in-person	work time		work time	in-person	work time	in-person

Similar to *Sample Hybrid Schedule #3*, except for TK and K classes.

- Two student cohorts, A and B, scheduled for daily in person with Wednesdays as a teacher planning/staff development day.

- Approximately 3 hours of structured instructional time per day, with 2 hours of in-person and 1 hour of asynchronous (which could be either online or offline) on Monday, Tuesday, Thursday and Friday, and 2 hours of whole-group online synchronous and 1 hour of asynchronous on Wednesdays. Because more teacher time would be spent on in-person teaching, teachers would be unable to do much whole-group online synchronous teaching (except for Wednesdays), meaning almost all online teaching and learning would be asynchronous. (And again, unless asynchronous assignments are strictly timed, they could be completed almost any time during the day.)

- Counting 3 hours of unstructured "work time," students' school day could be as long as 6 hours if desired.

- Includes live interaction with teacher and peers every day.

- No concurrent sessions with in-person and online at the same time.

- Scheduling student "work time" immediately before and after lunch provides teachers with 2 1-hours blocks of time each day for planning, collaboration and office hours and also creates a 3-hour block of time daily during which all classrooms can be cleaned before the afternoon cohorts arrive. (And there would be 3-hour afternoon block for planning and staff development on Wednesdays.)

With 8 hours of in-person instruction per week, *Sample Hybrid Schedule #4* would be a more advanced schedule suitable for schools that have already experienced success implementing health and safety protocols and piloting small groups of students on campus.

Sample Hybrid Schedule #5 – Grades 6-12

	MON		TUES		WEDS		THURS		FRI	
	A	B	A	B	A	B	A	B	A	B
8:00-9:00 (:60)	P1	async	P2	async	P3	async	P4	async	P5	async
9:00-9:45 (:45)	in person	async	in person	async	in person	async	in person	async	in person	async
9:45-10:30 (:45)	transition travel time/ brunch		transition travel time/ brunch		transition travel time/ brunch		transition travel time/ brunch		transition travel time/ brunch	
10:30-11:25 (:55)	P3 online sync		P4 online sync		P5 online sync		P2 online sync		P1 online sync	
11:25-12:35 (:10)	"passing" break		"passing" break		"passing" break		"passing" break		"passing" break	
11:35-12:30 (:55)	P5 online sync		P4 online sync		P1 online sync		P2 online sync		P3 online sync	
12:30-1:15 (:45)	transition travel time/ lunch		transition travel time/ lunch		transition travel time/ lunch		transition travel time/ lunch		transition travel time/ lunch	
1:15-2:00 (:45)	async	P1	async	P2	async	P3	async	P4	async	P5
2:00-3:00 (:60)	async	in person	async	in person	async	in person	async	in person	async	in person

Sample Hybrid Schedule #5

- Five-period block schedule with classes of 55 or 105 min. (50 or 100 min. instruction + 5 min. extra) on a 5-day cycle.

- Two student cohorts, A and B. One in-person period per day (with 1 cohort of students) and 2 online synchronous periods per day (whole class).

- Approximately 6 hours of structured instructional time per day, with a little less than 2 hours of in-person, a little less than 2 hours of online synchronous and about 2 hours of asynchronous (which could be either online or offline, and could really be completed any time during the day), multiplied by 5 classes equals approximately 9 hours of in-person per week, 9 hours of online synchronous per week and about 9 hours of asynchronous.

- Each class would have a little less than 2 hours of in-person per week, a little less than 2 hours of online synchronous per week, and asynchronous as needed (±2 hours per week).

- Includes live interaction with a teacher and peers every day.

- No concurrent sessions with in-person and online at the same time.

- Because students would have both in-person and online synchronous classes on the same day, "travel time" to and from school must be included. This model includes 45 min. before and after the mid-day online synchronous block for student "travel time."

- Teachers can use 1 of the 2 "travel time" blocks for lunch and the other for planning and collaboration. This model assumes that all teachers also have 1 prep period per class cycle.

- No time included for regular school-wide staff development.

- Scheduling student "travel time" before and after the mid-day online synchronous block creates a 3.5-hour block of time daily during which all classrooms can be cleaned before the afternoon cohorts arrive.

With approximately 9 hours of in-person instruction per week, *Sample Hybrid Schedule #5* offers a potentially safe model for bringing middle and high school students back to campus on a limited basis. *Sample Hybrid Schedule #5* is a more advanced schedule suitable for schools that have already experienced success implementing health and safety protocols and piloting small groups of students on campus.

Sample Hybrid Schedule #6 – Grades 6-12

	MON		TUES		WEDS		THURS		FRI		MON	
	A	B	A	B	A	B	A	B	A	B	A	B
8:00-9:00 (:60)	P1 in person	async	P2 in person	async	P3 in person	async	P4 in person	async	P5 in person	async	P6 in person	async
9:00-9:45 (:45)		async		async		async		async		async		async
9:45-10:30 (:45)	transition travel time/ brunch		transition travel time/ brunch		transition travel time/ brunch		transition travel time/ brunch		transition travel time/ brunch		transition travel time/ brunch	
10:30-11:25 (:55)	P3 online sync		P4 online sync		P5 online sync		P6 online sync		P1 online sync		P2 online sync	
11:25-12:35 (:10)	"passing" break		"passing" break		"passing" break		"passing" break		"passing" break		"passing" break	
11:35-12:30 (:55)	P5 online sync		P6 online sync		P1 online sync		P2 online sync		P3 online sync		P4 online sync	
12:30-1:15 (:45)	transition travel time/ lunch		transition travel time/ lunch		transition travel time/ lunch		transition travel time/ lunch		transition travel time/ lunch		transition travel time/ lunch	
1:15-2:00 (:45)	async	P1 in person	async	P2 in person	async	P3 in person	async	P4 in person	async	P5 in person	async	P6 in person
2:00-3:00 (:60)	async		async		async		async		async		async		

Based on *Sample Hybrid Schedule #5*, except built for a six-period schedule. Scheduling more than 1 in-person period (split into 2 cohorts) per day would be problematic because it wouldn't allow enough time to clean classrooms between cohorts using the same rooms, so schedules with more than 5 classes have to carry over into the following week. Seven- and eight-period schedules could theoretically be accommodated, but the frequency of each period's in-person class would be greatly reduced.

- Six-period block schedule with classes of 55 or 105 min. (50 or 100 min. instruction + 5 min. extra) on a 6-day cycle.

- Two student cohorts, A and B. One in-person period per day (with 1 cohort of students) and 2 online synchronous periods per day (whole class).

- Overall, approximately 6 hours of structured instructional time per day, with a little less than 2 hours of in-person, a little less than 2 hours of online synchronous and about 2 hours of asynchronous (which could be either online or offline, and could be completed any time during the day), multiplied by 5 classes per week equals approximately 9 hours of in-person per week, 9 hours of online synchronous per week and about 9 hours of asynchronous.

- Each class would have a little less than 2 hours of in-person per cycle, a little less than 2 hours of online synchronous per cycle, and asynchronous as needed (±2 hours per week). Not every class would meet in-person each week, but every class would meet at least twice per week in some combination of in-person and online.

- Includes live interaction with a teacher and peers every day.

- No concurrent sessions with in-person and online at the same time.

- Because students would have both in-person and online synchronous classes on the same day, "travel time" to and from school must be included. This model includes 45 mins. before and after the mid-day online synchronous block for student "travel time."

- Teachers can use 1 of the 2 "travel time" blocks for lunch and the other for planning and collaboration. The model assumes that all teachers also have 1 prep period per class cycle.

- No time included for regular school-wide staff development.

- Scheduling student "travel time" before and after the mid-day online synchronous block creates a 3.5-hour block of time daily during which all classrooms can be cleaned before the afternoon cohorts arrive.

- Regarding six-, seven- and eight-period schedules, at some point extending the class cycle out into a second week becomes problematic because of the frequency of each period's in-person class is reduced. Schools could shorten classes to squeeze in an extra online period, but unless schools have a system for rapidly cleaning classrooms or figure out a creative way to use facilities that avoids back-to-back classes, there most likely isn't a way to safely schedule more than 2 cohorts of in-person students per day. A more radical approach would be for a school to prioritize certain subject areas and not attempt to offer every subject as an in-person class. SB 98 prioritizes math, English language arts and ELD, then science, social studies and dual language classes; it makes no mention of elective classes, and specifically says that schools are not required to meet physical education requirements this year. Schools with too many periods *could* focus on core subjects for in-person instruction and continue to offer electives and PE classes online. Because PE and elective teachers hopefully won't have mixed schedules and also be teaching core classes, online-only versions of their classes could be offered to students (maybe on a voluntary basis) during students' asynchronous time, effectively extending students' instructional day much like a zero-period or a z-period (and shifting asynchronous work to after school as homework). If contractual and cost issues could be worked out with teachers and unions, schools might even be able offer in-person PE classes before students' morning in-person classes and/or after their afternoon in-person classes (obviously these classes would need to avoid close proximity and physical contact, but safely spaced-out yoga, stretching, exercise or even running might be possible if schools have open field space).

With approximately 9 hours of in-person instruction per week, *Sample Hybrid Schedule #6* offers a safe model for bringing middle and high school students back to campus on a limited basis. *Sample Hybrid Schedule #6* is a more advanced schedule suitable for schools that have already experienced success implementing health and safety protocols and piloting small groups of students on campus.

Other Considerations for Hybrid Teaching and Learning

Explicitly Teaching Technology

While many teachers' (and students' and parents' and administrators') first reaction to in-person instruction may be to see it as an *alternative* to online teaching and learning, educators would do well to view it more as a *companion*. As has been noted before, a rigorous, well-balanced hybrid program should include both in-person and online instruction. Additionally, as the COVID-19 pandemic waxes and wanes, students, cohorts, classes, even whole schools may find themselves quarantined again and forced back to 100% distance-only teaching and learning for a time. It would behoove teachers to use some amount of their in-person time with students to explicitly teach them about the technology and applications they will continue to use. Depending on the age and experience of students, it might be a review, making sure every student can get the most out of online tools, or it could be a chance to work through frustrating issues teachers experienced over and over again during distance teaching and learning. It might include reviewing their school's learning management system, how to find assignments and turn them in correctly, or how to check grades. It could include how to log in to frequently used quiz and polling apps or how to work effectively in online breakout rooms. It could be a lesson on how to send an email or the difference between etiquette for hand-written letters, email, and text messages. It could even be an opportunity to train students on new applications teachers want to begin using as they move into the next phase of online education. Teachers are also encouraged to continue using the same online tools and platforms they did during distance-only instruction, even during in-person teaching and learning, such as using the learning management system to assign and collect some student work, occasionally using quiz and polling apps to engage students during in-person classes, or, if access to technology in the classroom permits, continuing to use collaborative tools like shared documents and video conferencing platforms for physically-distanced in-class work. Continued use of technology in an in-person classroom will also support health and safety protocols by reducing the need to pass around or collect materials, papers, tests, etc.

Materials

While some teachers, schools and communities have figured out ingenious ways to get school supplies and instructional materials to students during the physical closure of schools, some students have had little or no access to physical supplies and materials from school this entire school year. That will change once in-person instruction resumes. Students won't be able to share materials with other students, but they will have increased access to school supplies, art and science materials, textbooks, workbooks and other reading materials, and teachers should

plan accordingly. Take-home work in a hybrid setting can be richer, more complex, more project-based, and take fuller advantage of the different print components of adopted programs. Teachers can also take advantage of in-person time at school to work with students to create resources that the students can take home to use during online instruction, resources like response cards, number and letter flashcards, math manipulatives, notetaking guides, lists of logins, passwords and access codes, etc. Some distance teaching and learning should continue even after schools shift to hybrid programs (and they may have to shift back to 100% distance-only teaching and learning if forced to quarantine again), so this is an opportunity for teachers to make sure students have everything at home that they wish students had had at home during the spring and fall.

Homework

In a hybrid program, it is important to understand the difference between work that is done at home during the school day as part of students' asynchronous learning time and "homework," which, before the pandemic, usually referred to extra work assigned to students to do at home after school. For the 2020-2021 school year, the state has approved a shortened school day for all students, knowing that students could not be expected to sit at home doing schoolwork for 6-7 hours per day the same way they would if they'd been at physically present at school; many students home situations are not conducive to long periods of distance learning, and few children have the self-disciple and attention span to do it anyway. In most cases, the reduced school day is about half what students traditionally experienced, and in a distance teaching and learning program, it already includes an element of schoolwork done at home during the school day. Few teachers assigned additional work to be completed after school hours. It was challenging enough to keep students engaged and caught up on during-the-school-day work; assigning even more homework to students who were already working at home didn't usually seem productive. As schools transition to hybrid programs, however, students will be doing less during-the-school-day work at home and more at school. Still, many students' homes and home-life situations continue to be disrupted by the pandemic and

teachers should think very carefully before assigning additional homework above and beyond the work students do during the school day. This is especially true for younger students who may or may not have strong support at home. Older students, on the other hand, especially if they are participating in several different classes per day, may benefit from a bit of homework that gives them a chance to reinforce or extend skills and concepts from their classes. As a general rule, though, any homework assigned to middle and high school students should still not amount to more than students can complete before the end of the pre-pandemic school day, i.e., no more than 1-2 hours total for students at schools running a minimum school day, and much less for students at schools running school days longer than the state approved minimum.

Concurrent In-Person and Online Instruction

Catlin Tucker, educational technology expert, has said that teaching in-person and remote online students via streaming video at the same time is the most difficult way to structure hybrid teaching. This model appeals to many school districts, however, because it seems to "solve" many of their scheduling challenges, and some teachers may find themselves in a concurrent hybrid model. For those forced into this situation, there are two core principles for more effective concurrent hybrid instruction: *simultaneous participation and interaction* and *equivalent experiences*. Depending on the structure of the day and what resources are available – both of which may be out of teachers' control – these may be challenging to achieve, but are worth understanding, even if only as goals.

- ***Simultaneous Participation and Interaction*** – Online students should see the same lessons at the same time as their in-person peers and online students should have a way to actively participate in the lesson, by asking question, offering answers or doing whatever the in-person students are doing, and to interact with peers so lessons aren't just online students watching their in-person peers have interactive experiences with the teacher. Realistically, this is just as challenging as it sounds. Concurrent hybrid models (such as *Optimal*

Engagement and Immersion Pedagogy or "OEIP") were originally developed for a university setting, where expectations for participation and interaction are vastly different than in an elementary or even secondary school classroom. The technological demands required to conduct a lesson like this are also significant – Are there multiple cameras to capture and stream the teacher as she walks around the classroom, do all in-person students have laptops, are they mic'ed so their online peers can hear them, is there some kind of projection screen where in-person students can see the responses of online students, is everyone still using a shared online platform like Google Docs? And training - this would be a completely new way of teaching for most teachers. What training and support will be provided by schools and districts?

- ***Equivalent Experiences*** – For those lessons that simply cannot be conducted simultaneously to both groups of students, teachers should strive to at least provide equivalent experience to both groups of students. It would be unfair to teach a science concept to in-person students through a hands-on lab experience and to then have online students watch a video and fill in a worksheet. Again, realistically, this will mean having to do additional research and planning because teachers will have to prepare two parallel courses of study for in-person and online students. If teachers do not have additional planning and collaboration time built into their schedules, it is fair to ask how teachers can accomplish this along with their other responsibilities. If teachers unavoidably find themselves teaching in this model, working together with colleagues to collaborate and share planning and resources may be the best solution in this difficult situation.

Supervision is not one of the core principles of concurrent hybrid instruction, but it is something teachers and administrators will need to consider when planning for concurrent teaching and learning. How will teachers monitor students' needs and interactions online and in the classroom at the same time? During distance teaching and learning, parents and administrators (and even other students) expressed concerns about students' online behavior in video conferencing platforms like Zoom and Google Meets. Teachers were expected to monitor chat, Q&A and breakout rooms. Used well, chat and breakout rooms can turn the online setting into an engaging, interactive learning environment, but if teachers are expected to monitor both online and in-person students at the same time, by themselves, they may have to shut down these interactive features, reducing online live-streaming to a passive, television-like experience. Even tasks as mundane as "admitting" students to online Zoom sessions (because teacher must use security features like waiting rooms) will draw teachers' attention away from in-person students and could disrupt live lessons. The only solution may be to think outside the box. Is additional aide support possible for concurrent hybrid classrooms, so the teacher can focus on instruction and the aide can support with online supervision and making sure online students are engaged? Could two classes be combined safely, allowing teachers to co-teach, with one focusing on in-person students and one focusing on online students? If the number of online students is small relative to the number of in-person students, would it make more sense to pull all the online students from several classes together and form a new online-only class, eliminating the need for concurrent instruction?

Hybrid teaching and learning are difficult enough, for students and teachers alike. The extra complexity added by teachers having to work with in-person and online students at the same time should be avoided. Without robust support in the form of additional staffing, technology and training, concurrent hybrid models where teachers instruct some students in-person while simultaneously instructing others through live streaming video, cannot be recommended.