

# Deep Dive: Transformation of Lessons from In-Person to Virtual

## STAGE THREE

### GROUPING STUDENTS

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
<p><i>Start:</i></p> <ul style="list-style-type: none"> <li>• Ensure grouping arrangements maximize opportunities for increasing student understanding</li> <li>• Prepare students to accomplish the goals of the lesson by providing clear expectations for performance</li> </ul>	<ul style="list-style-type: none"> <li>• Plan for groups that will maximize student understanding</li> <li>• Share visuals of group expectations and goals</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare student groups based on their learning modality               <ul style="list-style-type: none"> <li>– Students with internet connectivity</li> <li>– Students without connectivity</li> </ul> </li> <li>• Prepare student communication and work product expectations visuals and/or recordings</li> <li>• Create small groups to be an additional social-emotional learning support throughout the year</li> <li>• Create resources designed with specific groupings in mind               <ul style="list-style-type: none"> <li>– Stretch tasks for students who are demonstrating mastery</li> <li>– Additional practice for students needing limited support</li> <li>– Intervention resources for students struggling</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Plan to integrate real-time and asynchronous groups as appropriate               <ul style="list-style-type: none"> <li>– Whole class meeting</li> <li>– Breakout groups</li> <li>– Group presentations</li> <li>– Offline group work time</li> <li>– Study groups</li> </ul> </li> <li>• Have varied breakout groups planned throughout the lessons               <ul style="list-style-type: none"> <li>– Mixed ability</li> <li>– Homogeneous ability</li> <li>– Randomized</li> </ul> </li> <li>• Plan group check-ins based on anticipated needs               <ul style="list-style-type: none"> <li>– Check for understanding strategically</li> <li>– Ensure time is dedicated to students with anticipated misunderstandings</li> </ul> </li> </ul>
<p><i>Middle:</i></p> <ul style="list-style-type: none"> <li>• All students in groups know their roles, responsibilities, and group work expectations</li> <li>• All students participating in groups are held accountable for group work and individual work</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure that all students are familiar with, and receive feedback on, the expectations of the group and their own work</li> </ul>	<ul style="list-style-type: none"> <li>• Use a consistent grouping protocol               <ul style="list-style-type: none"> <li>– Create resources showing examples and non-examples of expectations being met</li> <li>– Give public praise to groups meeting expectations</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Circulate among groups               <ul style="list-style-type: none"> <li>– Tie feedback to specific expectations, roles, and success criteria</li> <li>– Redirect off-task students</li> </ul> </li> <li>• Provide students with a clear notetaking template or graphic organizer for group time and include instructions</li> </ul>

## GROUPING STUDENTS

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
		<ul style="list-style-type: none"> <li>• Allow students to give feedback on the roles of others                             <ul style="list-style-type: none"> <li>— Use a non-judgmental survey to assess participation</li> </ul> </li> <li>• Include opportunities for all students to submit their contributions to the overall group task</li> </ul>	<p>to allow all students to access materials</p> <ul style="list-style-type: none"> <li>• Provide opportunities for groups to self-assess their work tasks using provided success criteria in real time</li> </ul>
<p><i>End:</i></p> <ul style="list-style-type: none"> <li>• Design instructional groups to facilitate opportunities for students to set goals, reflect, and evaluate their learning</li> </ul>	<ul style="list-style-type: none"> <li>• Allow students to have the opportunity to set goals, reflect, and evaluate their learning and give feedback on the process</li> <li>• Create a familiar process to close out group work</li> </ul>	<ul style="list-style-type: none"> <li>• Administer a survey having students:                             <ul style="list-style-type: none"> <li>— Assess the goals of the group</li> <li>— Reflect on their role in the outcome</li> <li>— Evaluate what they've learned</li> </ul> </li> <li>• Give feedback on the process</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitate a conversation within the group where they:                             <ul style="list-style-type: none"> <li>— Discuss achievement against goals</li> <li>— Reflect on the overall outcome</li> </ul> </li> <li>• Evaluate what they learned</li> </ul>

## TEACHER KNOWLEDGE OF STUDENTS

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
<p><i>Start: Scaffold Support</i></p> <ul style="list-style-type: none"> <li>• Assess student understanding at the start of the lesson with a “do now” and make adjustments to the lesson content based on this informal assessment</li> <li>• Incorporate the use of visuals and anchor documents to support the new concepts within a lesson</li> <li>• Provide opportunities for students to activate their schema/prior knowledge and</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure that lesson structure and materials allow for differentiation based on student needs                             <ul style="list-style-type: none"> <li>— Provide students with an opportunity to review prior learning visually (e.g., PowerPoint) to serve as a way to differentiate/scaffold</li> <li>— Identify points in the lesson to assess student understanding and provide clarification</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Have a variety of materials or exercises that are responsive to students’ current learning needs, including graphic organizers and scaffolded resources, to ensure access to standards-aligned tasks for all students</li> <li>• Proactively plan additional outreach and support students who may struggle</li> <li>• Plan pulse checks throughout the lesson</li> </ul>	<ul style="list-style-type: none"> <li>• Anticipate student misunderstandings and plan to accommodate them                             <ul style="list-style-type: none"> <li>— Prioritize checking in with students during practice sessions and think through anticipated misconceptions</li> <li>— Strategically group students to focus support</li> </ul> </li> <li>• Facilitate real-time practice through a variety of means                             <ul style="list-style-type: none"> <li>— Virtual whiteboards</li> <li>— Google docs</li> </ul> </li> </ul>

## TEACHER KNOWLEDGE OF STUDENTS

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
<p>make connections to their own backgrounds, cultures, and experiences</p>		<ul style="list-style-type: none"> <li>— If mastered, have students navigate to one folder</li> <li>— If not, have students navigate to another folder</li> <li>• Facilitate opportunities for students to practice through a variety of means                             <ul style="list-style-type: none"> <li>— Google docs</li> <li>— Message boards</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>— Chat functionality</li> <li>— Breakout rooms</li> </ul>
<p><i>Throughout the Lesson: Attend to Individual Student Needs and Use Culturally Responsive Practices</i></p> <ul style="list-style-type: none"> <li>• Regularly provide differentiated instructional methods and content to ensure students have the opportunity to master what is being taught</li> <li>• Provide explicit models of academic expectations</li> <li>• Provide whole group and small group opportunities for students to share relevant examples from their perspectives and experiences</li> <li>• Ask questions and encourage students to problem-solve with an intentional focus on students' own community</li> <li>• Engage students in thinking and problem-solving through discussion, exploration, and collaboration</li> <li>• Ensure students have numerous opportunities for meaningful engagement that is framed around high academic expectations</li> </ul>	<ul style="list-style-type: none"> <li>• Plan multiple ways to incorporate student interests and cultures                             <ul style="list-style-type: none"> <li>— Surveys/polls</li> <li>— Choice in tasks</li> </ul> </li> <li>• Provide explicit models of expectations and relevant examples</li> <li>• Utilize breakout rooms to allow for extended discussion, exploration, and collaboration to engage students in rigorous problem-solving tasks</li> <li>• Provide students with opportunities to choose questions in response to chat</li> <li>• Use open mic discussion to encourage students to justify and expand on their responses to questions posed</li> </ul>	<ul style="list-style-type: none"> <li>• Proactively learn about students using                             <ul style="list-style-type: none"> <li>— Office hours</li> <li>— Individual student calls</li> <li>— Interest surveys</li> <li>— Family outreach</li> </ul> </li> <li>• Incorporate student interests into assignments                             <ul style="list-style-type: none"> <li>— Modify questions to include relevant activities</li> <li>— Allow student choice in assignments</li> <li>— Tailor projects to mirror student interests</li> </ul> </li> <li>• Celebrate and support cultural differences                             <ul style="list-style-type: none"> <li>— Ensure there is multicultural representation in materials used</li> <li>— Model culturally responsive language and culture</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Proactively learn about students using                             <ul style="list-style-type: none"> <li>— Interactive journaling</li> <li>— Interest surveys</li> </ul> </li> <li>• Incorporate student interests into assignments                             <ul style="list-style-type: none"> <li>— Adjust real-time questions to be relevant to students</li> <li>— Allow student choice in assignments</li> <li>— Design choice boards that incorporate students' interests</li> <li>— Create individual playlists to align to student needs and interests</li> <li>— Tailor projects and groups to integrate a diversity of student interests, perspectives, and cultures</li> </ul> </li> <li>• Celebrate and support cultural differences                             <ul style="list-style-type: none"> <li>— Ensure there is multicultural representation in materials used</li> <li>— Model culturally responsive language and culture</li> </ul> </li> </ul>

## TEACHER KNOWLEDGE OF STUDENTS

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
(rigorous and standards-aligned) <ul style="list-style-type: none"> <li>Regularly incorporate student interests and cultural heritage</li> </ul>			

## THINKING

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
<i>Start:</i> <ul style="list-style-type: none"> <li>Model types of thinking for students</li> <li>Provide opportunities for students to connect previous learning to new objectives</li> <li>Provide students with the opportunity to solve a novel problem</li> </ul>	<ul style="list-style-type: none"> <li>Plan for different types of thinking early in lessons and prepare to support students in utilizing them (e.g., prep a series of demonstrations)</li> <li>Model how one type of thinking may be applied to the beginning of the lesson</li> </ul>	<ul style="list-style-type: none"> <li>Thinking analytically                             <ul style="list-style-type: none"> <li>Draw initial connections to the previous lesson and then have students submit their own connections by responding to a written prompt</li> <li>Give students the opportunity to compare previously covered material that relates to the current lesson</li> </ul> </li> <li>Thinking creatively                             <ul style="list-style-type: none"> <li>Frame the lesson around a problem to prompt creative thinking and problem-solving</li> <li>Have students set a goal for their work</li> </ul> </li> <li>Thinking practically                             <ul style="list-style-type: none"> <li>Use a real-life example to frame the lesson</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Thinking analytically                             <ul style="list-style-type: none"> <li>Provide students with opportunities to have student-led mini-lessons</li> <li>Engage in a class discussion or chat connecting prior content to new objectives</li> <li>Ask students to transform the lesson's objective into an essential question and share that question in the chat box</li> </ul> </li> </ul>
<i>Middle:</i> <ul style="list-style-type: none"> <li>Provide opportunities for students to analyze problems from multiple perspectives and viewpoints</li> </ul>	<ul style="list-style-type: none"> <li>Engage students in a variety of thinking types with opportunities to check for understanding aligned to a thinking type</li> </ul>	<ul style="list-style-type: none"> <li>Thinking analytically                             <ul style="list-style-type: none"> <li>Assign students periodic opportunities to reflect on their thinking process throughout the lesson</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Thinking analytically                             <ul style="list-style-type: none"> <li>Design a virtual debate where students defend an assigned position</li> <li>Engage in group error analysis, providing</li> </ul> </li> </ul>

## THINKING

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
<ul style="list-style-type: none"> <li>• Monitor student thinking to ensure that they understand what they are learning</li> <li>• Provide opportunities for students to exhibit learning in creative ways</li> <li>• Engage students in topics that require analysis and synthesis of ideas, models, and solutions</li> <li>• Enhance understanding by having students engage in multiple types of thinking</li> </ul>	<ul style="list-style-type: none"> <li>• Develop structures and periodic checkpoints for students to monitor and explain their thinking process</li> <li>• Utilize lesson activities and assignments that require analysis and synthesis of ideas, models, and solutions</li> </ul>	<ul style="list-style-type: none"> <li>— Have students explain why their answer is correct</li> <li>— Create opportunities for student-led video presentations</li> <li>• Thinking creatively               <ul style="list-style-type: none"> <li>— Utilize online whiteboards, videos, and 3D tours</li> </ul> </li> <li>• Research-based thinking               <ul style="list-style-type: none"> <li>— Explicitly teach research skills and expectations</li> <li>— Synthesize information from a variety of sources to draw conclusions</li> <li>— Have students research a topic that interests them and prepare a 5-minute “Ted Talk” to present in their next lesson</li> </ul> </li> </ul>	<p>students opportunities to explain their thinking</p> <ul style="list-style-type: none"> <li>• Thinking creatively               <ul style="list-style-type: none"> <li>— Allow for multimedia submissions</li> <li>— Utilize collaborative online whiteboards, share documents, and creative tools</li> <li>— Ask students to present a 5-minute “Ted Talk” on a topic they have previously researched</li> </ul> </li> <li>• Research-based thinking               <ul style="list-style-type: none"> <li>— Explicitly teach research skills and expectations</li> <li>— Synthesize information from a variety of sources to draw conclusions</li> <li>— Provide opportunities for students to research technology tools they would like to use in a future project</li> </ul> </li> </ul>
<p><i>End:</i></p> <ul style="list-style-type: none"> <li>• Revisit problem-solving skills practiced earlier in the lesson</li> <li>• Assess understanding by having students express their thinking in multiple ways</li> <li>• Have students apply their learning in creative ways</li> </ul>	<ul style="list-style-type: none"> <li>• Allow students to show learning through different types of thinking</li> <li>• Utilize the virtual setting to extend learning applications into students’ real life</li> </ul>	<ul style="list-style-type: none"> <li>• Thinking practically               <ul style="list-style-type: none"> <li>— Ask students to teach someone at home what they have learned</li> <li>— Align projects to real-life application</li> <li>— Provide opportunities for students to self-reflect on their goals using the lesson’s success criteria</li> </ul> </li> <li>• Thinking creatively               <ul style="list-style-type: none"> <li>— Allow for multimedia submissions</li> <li>— Provide opportunities for students to generate their</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Thinking practically               <ul style="list-style-type: none"> <li>— Have students share real-life applications of learning</li> <li>— Develop exit ticket questions focused on how students will apply their new learning</li> </ul> </li> <li>• Thinking creatively               <ul style="list-style-type: none"> <li>— Provide opportunities for students to generate their own problems/tasks for others to complete</li> </ul> </li> </ul>

## THINKING

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
		<ul style="list-style-type: none"> <li>• own problems/tasks for others to complete</li> <li>• Research-based thinking                             <ul style="list-style-type: none"> <li>— Research projects on standards-aligned content</li> <li>— Assign an end-of-unit wrap-up task requiring research into bigger lingering questions</li> </ul> </li> </ul>	

## PROBLEM-SOLVING

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
<p><i>Start:</i></p> <ul style="list-style-type: none"> <li>• Introduce the lesson with a multi-step problem that is considered throughout the lesson</li> </ul>	<ul style="list-style-type: none"> <li>• Enable students to begin problem-solving at the beginning of the lesson by sharing a visual, video, or recording of a multi-step problem that frames the lesson objectives for the day</li> </ul>	<ul style="list-style-type: none"> <li>• Create a discovery-based learning activity to begin the lesson</li> </ul>	<ul style="list-style-type: none"> <li>• Create situations for hypothesis creation and evaluation</li> </ul>
<p><i>Middle:</i></p> <ul style="list-style-type: none"> <li>• Implement activities that teach and reinforce problem-solving</li> </ul>	<ul style="list-style-type: none"> <li>• Implement activities that reinforce problem-solving skills</li> </ul>	<ul style="list-style-type: none"> <li>• Have students create representations for their thinking</li> <li>• Develop tasks that prompt categorization (e.g., students are given options on choice boards and categorize options)</li> <li>• Given an incomplete scenario or story, ask students to complete it</li> <li>• Ask students to complete an error analysis and explain their thinking through recordings or writing</li> </ul>	<ul style="list-style-type: none"> <li>• In groups, have students create representations of how to solve the problem using virtual tools</li> <li>• Consistently ask students to fully explain and create visuals of their reasoning</li> <li>• Complete error analyses</li> <li>• Facilitate breakout room brainstorms and/or jamboard brainstorms</li> </ul>

## PROBLEM-SOLVING

In-Person	Virtual	Asynchronous Strategies	Synchronous Strategies
		<ul style="list-style-type: none"> <li>Design tasks where students determine which information is needed</li> </ul>	
<p><i>End:</i></p> <ul style="list-style-type: none"> <li>Revisit and use original introductory problem for closure to reinforce problem-solving</li> </ul>	<ul style="list-style-type: none"> <li>Embed opportunities for problem-solving within work products and lesson closure</li> </ul>	<ul style="list-style-type: none"> <li>On exit surveys, have students connect current learning to prior lessons</li> <li>Create shared word clouds after lesson completion</li> </ul>	<ul style="list-style-type: none"> <li>Create long-term, group-based problem-solving projects</li> </ul>