Planning for Equitable Virtual Instruction

This resource was developed by the Rhode Island Intensive Math Intervention Project—a RIDE-funded initiative housed at the American Institutes for Research. The purpose of this resource is to support LEA personnel with planning virtual instruction that takes into consideration student access to technology, as well as instruction within virtual settings that considers the needs of multiple types of learners. There is a completed lesson plan example as a part of Step 2. In Step 3, you will find a blank template to complete for your own use.

Step 1: Consider Student's Access to Technology (Devices and WiFi/internet)

For ALL scenarios: *Involve (to the extent possible) parents and families.* ***Communicate the what*** *(where to access information, how will assignments/lessons be shared and graded, length of time, etc.)* ***and the how*** *(which tools are being used, login information, other modalities for submission if technology/WiFi/internet are not available).*

Scenario	If…	Then…
1	Students have access to a computer and have reliable home WiFi/internet access and have previously used an online learning classroom (e.g., for full classes and/or assignments).	**Plan ways for students to engage in reciprocal learning** • Hold a video class with students using live, streaming feed that allows students the opportunity to respond just-in-time (e.g., Zoom, Facebook Live, YouTube) • Use an asynchronous "flipped" model where the students watch an instructional video and complete an activity (submit an assignment, submit videos, comment on others' work) • Use a hybrid model with a "flipped" lesson and a time when the students log in simultaneously to share thoughts/ideas/reactions to content through a discussion/chat forum or a group google hangout
2	Students have access to a computer and have reliable home WiFi/internet access, but have not previously used an online learning classroom/format.	**Pre-teach how to navigate/use the virtual platform prior to engaging students in reciprocal learning** • Pre-record a video tutorial (or locate a vendor's tutorial) and share with students and families. Make sure they have some way to demonstrate to you that they navigated the platform correctly • Create a virtual platform scavenger hunt where students complete tasks in the virtual environment to demonstrate their ability to navigate accurately • Allow students to practice and provide them feedback (e.g., through online chat/email/call/hangout) prior to having them use the technology for the intended use
3	Students have access to a computer, but don't have reliable WiFi/internet access.	• Extend submission times for assignments • Remove any interactivity components (e.g., google hangouts) • Provide additional ways for students to submit content:

		○ email ○ voicemail message ○ text message with picture/image or response to a question ○ snail mail
4	Students have a different type of technology (cell phone, iPad/tablet) to leverage, but don't have a computer?	**Evaluate the capability of the technology** • Is there an "app" version of a webpage they can load? • Can they use their technology to complete assignments in a different way? **Then, determine how to involve students through a combination of Scenarios 2 and 3**
5	Students don't have access to any type of technology, but have a parent/family member who do.	**Mail home packets with explicit steps for students to complete and allow students to submit content through:** ○ voicemail message ○ text message with picture/image or response to a question ○ snail mail
6	Students present with cognitive/physical/ sensory delays inhibiting their access to online learning modalities.	**Plan for in-home and/or compensatory services for instructional areas, as well as for any related services, addressed through IEP goals** • Send home learning materials at the student's instructional level • Work closely with parents and families

Step 2: Consider Instruction in the Virtual Environment

General Education Virtual Instruction

- How is virtual instruction being delivered to all students?
- How is that instruction being monitored?
- How is student work being assessed?
- How are you universally designing virtual instruction for ALL learners in your classroom (e.g., differently abled students including IEPs and ELL/MLL)?

Specially Designed Virtual Instruction

- How will instruction in IEP goal areas be specially designed?
- What additional resources and/or supports will you need for monitoring implementation?
- How will you monitor student progress toward IEP goals during virtual instruction?

Example of an Equitable Virtual Mathematics Lesson

CCSS-M Addressed: Extend understanding of fraction equivalence and ordering. 4.NF.A

Student-Level Outcome: Show—using a visual model—how fractions are equivalent, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size.

	Teacher-Directed Lesson	**Student-Directed Learning**	**Supports for struggling learners,[1] including Accommodations or Modifications[2]**	**Specially Designed Virtual Instruction[3]**	**Student Submitted Products[4]**
Warm-Up	Virtual Number Talk	Number Talk Practice	• Reduce the number of responses that struggling learners need to submit • Hold a google hangout for them to verbally respond	Number Talks are already designed to be low floor, high ceiling	Submit their Number Talk responses (e.g., recording, picture of work, document)
Lesson:	Record and/or have students watch a quality instructional video that introduces visual models. During the video, define "equivalent" on a Frayer Model worksheet	**How instruction will be universally designed:** • Provide all students with access to virtual manipulatives to use as they follow along with the video • Provide all students with a blank Frayer Model worksheet to complete	• Provide a vocabulary bank with picture cues and/or definitions in student's home language • Provide some students with a scaffolded version of a Frayer Model worksheet (e.g., with images/pictures, portions already completed, definitions in home/native language)	• Woot Math adaptive lesson (additional time) • Special educator adds additional instructional videos for the student to watch: (Fraction Modeling Instructional Videos)[5]	Submit their completed Frayer Model
Practice	Record a video modeling how to complete one practice problem using Printable Fraction Manipulatives and then have students work independently to complete practice problems	Curricular practice sheets that students can use with printable manipulatives (Practice Sheet Sample)	• Create an account on Woot Math and assign an adaptive lesson		Submit their completed practice sheets

[1] ELLs/MLLs and/or students who have communication needs or are low performing in reading
[2] Specific for students with IEPs
[3] SDI is in addition to teacher-directed lesson + student-directed practice
[4] Determine in advance what will be graded
[5] Make sure that you click on the + next to "Instructional Videos" to reveal all of the video options

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Task /Application	Post the prompt on Google classroom for students to engage in a virtual conversation around an image of pattern blocks. Pose questions throughout the week to provoke students' thinking in terms of equivalent fractions.	Students will create their own image using virtual pattern blocks and determine the fraction part of the whole for a certain color.	• Provide additional models with parts of the whole image labeled to scaffold student thinking (how many pieces of a/b size). • Provide guidance around pattern block equivalence using YouTube videos or screencasts showing the equivalent comparisons.	• Special educator reviews pre-requisite skills using teaching guides • One-on-one Google hangout session with special educator	Students post an image of their pattern blocks, respond to 3 peers' images about the fraction of their design, and comment at the end of the week regarding your image's fraction representation and all equivalent fractions.

Suggested Weekly Implementation Timeline

- Daily Warm-Up Activities (submitted by student by the end of the week)
- Teacher-Directed Lesson (no more than 15 minutes; consider at least two lessons per week)
- Daily Student-Directed Practice (submitted by student by the end of the week)
- Task (one task per week)

Step 3: Blank Virtual Lesson Planning Template

CCSS-M Addressed:

Student-Level Outcome:

	Teacher-Directed Lesson	Student-Directed Learning	Supports for struggling learners,[6] including Accommodations or Modifications[7]	Specially Designed Virtual Instruction[8]	Student Submitted Products[9]
Warm-Up					
Lesson:					
Practice					

[6] ELLs/MLLs and/or students who have communication needs or are low performing in reading
[7] Specific for students with IEPs
[8] SDI is in addition to teacher-directed lesson + student-directed practice
[9] Determine in advance what will be graded

	Teacher-Directed Lesson	Student-Directed Learning	Supports for struggling learners,[6] including Accommodations or Modifications[7]	Specially Designed Virtual Instruction[8]	Student Submitted Products[9]
Task /Application					

Suggested Weekly Implementation Timeline

What will the students complete daily and/or weekly? How often will the submit their work?