

Data Tools for Virtual Learning

With school closures, data collection and tools are critical to meeting the current needs of students and teachers. Data points provide insight into all students' progress and progress towards IEP goals. These data points also provide additional information when planning for the 20-21 School Year and developing personalized plans for students. This resource's purpose is to show how the CMOs within our network and others are using data and then take a deeper dive into one CMO's data practices.

In this guide, you will find:

- [School Data Tracking Systems](#)
- [One School's Story](#)
- [Learning Management Systems](#)
- [Additional Online Educational Sites](#)
- [Learnings to Come](#)

Additional related resources include:

- [Progress Monitoring](#)
- [Virtual Service Provision Calendar - KIPP](#)
- [Rocketship's Reflection on Remote Learning](#)
- [Tech Distribution](#)
- Transition Planning (*coming soon*)

Audience: School Leaders, Administrators, Teachers and Instructional Personnel (e.g. Para-Professionals)

School Data Tracking Systems

The listed items below represent elements of schooling that need to be measured. However, these are measured differently or are potentially more difficult to measure now in virtual school. The following table outlines ways of measuring these topics and tracking tools for the virtual setting. Each item, measure, and the tools come directly from Charter Management Organizations (CMOs) or from research-based articles on how schools use data tracking systems.

School Data Tracking Systems		
Item	Measures	Tools for Tracking
Attendance / Logins Purpose: How students are accessing distance learning environments (vs. expectations)	<ul style="list-style-type: none"> • % of students logging into a platform • % of students in a virtual class or check-in • % of students checking in with teachers, mentors, counselors • % of students progressing on goals or assignments 	<ul style="list-style-type: none"> • Existing SIS tools (if still using) • Daily goal setting used for attendance (1x daily) • Teacher tracking using an excel sheet • School Leaders go into virtual classrooms and take attendance

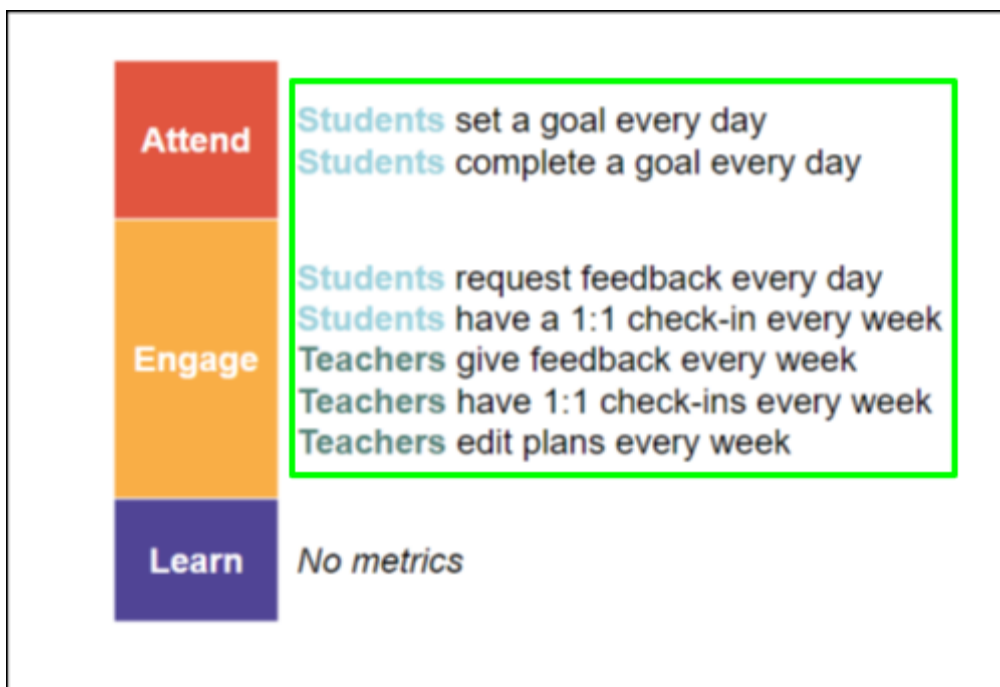
		<ul style="list-style-type: none"> Using virtual platform tracking tools Tracking contacts made to school
<p>Disseminating Content and Assigning Work</p> <p>Purpose: How teachers are communicating and assigning work.</p>	<p>Disseminating: Updating weekly</p> <ul style="list-style-type: none"> School websites - number of times students/families click in Recorded video of the lesson - number of students clicking in Mailing work packets home Use of educational sites to the right <p>Assignments that are being collected:</p> <ul style="list-style-type: none"> % of certain assignments assigned and submitted % of assignments collected (e.g. stated as a deliverables) % of mailing home packets Use of educational sites to the right 	<p>Creating classes on:</p> <ul style="list-style-type: none"> Clever Newsela Khan Academy School websites Learning Management Systems, including PowerSchool, Moodle, Google Classroom, Summit Learning Platform, Gooru, etc Alternatives to online assignment submission students could: <ul style="list-style-type: none"> Students taking pictures and texting/emailing it to teachers Schools are designating specific days and times each week for when students submit their assignments
<p>Collecting and Assessing Work</p> <p>Purpose: Assessing student learning</p>	<ul style="list-style-type: none"> Formative assessment (Check for Understanding, exit tickets) If students are not engaging or progressing, understanding why (e.g. access to technology, understanding content, delivery of content, etc). 	<ul style="list-style-type: none"> Data protocol to determine next steps (e.g. enrichment, reteaching, moving on) Phone, video, email log
<p>Special Education</p> <p>Purpose: Ensure students are receiving services and teachers are Progress Monitoring</p>	<ul style="list-style-type: none"> % of students making progress on their IEP goals % of students receiving related services % of students receiving small group support % of students receiving co-teaching in virtual classroom 	<ul style="list-style-type: none"> Tracking services - KIPP Sample - IEP Matrix Service Sample - Student SDI Tracker
<p>Grading</p> <p>Purpose:</p>	<ul style="list-style-type: none"> % of students passing % of students who are on the cusp 	<ul style="list-style-type: none"> Learning Management System Student Information System

<p>Understanding students on tracking for graduation/promotion</p>	<ul style="list-style-type: none"> ● % of students who may need a personalized plan ● % of students who need re-teaching 	
<p>Social-Emotional Learning and Student Engagement</p> <p>Purpose: Checking on well being of students</p>	<ul style="list-style-type: none"> ● % of students setting goals ● % of students turning in assignments ● % of students completing well check surveys ● % of students meeting with mentors 	<ul style="list-style-type: none"> ● 7 Goal setting and completing apps <ul style="list-style-type: none"> ○ Also can be on google forms ● Virtual classroom observations consideration doc ● Student Well-being check-in ● Distance Check-in ● Sample Survey Questions ● Sample Communications Tracker ● Sample SEL Reflection Protocol ● Student Engagement Tracker
<p>Family Engagement/ Communication</p> <p>Purpose: Understanding family context and needs</p>	<ul style="list-style-type: none"> ● Number of school contact attempts ● Number of family contact attempts ● Number of families attending virtual sessions 	<ul style="list-style-type: none"> ● Sample - Short question survey for a “well-ness” check-in with families ● Sample Communications Tracker ● Hosting weekly/monthly virtual coffee with principals ● Class Dojo ● Following behavior support plans
<p>Lunch Distribution</p> <p>Purpose: Ensure students have food and tracking FRL</p>	<ul style="list-style-type: none"> ● % of students who have FRL ● % of students and families who come and pick up food ● Survey results ● Food Distribution Counts 	<ul style="list-style-type: none"> ● Sample - Survey tool on number of food for distribution and locations pick-ups ● Sample - Survey tool for food distribution
<p>Tech Distribution</p> <p>Purpose: Tracking to ensure equitable access.</p>	<ul style="list-style-type: none"> ● % of students who have access to internet ● % of student who have access to computers ● % of students and families who picked up tech resources ● Tracking of devices checked out/returned to/from families ● Tracking of tech issues and repairs 	<ul style="list-style-type: none"> ● Sample Survey for K-12 Distance Learning from Survey Monkey

	<ul style="list-style-type: none"> • Survey results 	
<p>Teacher Wellness</p> <p>Purpose: Supporting the needs of teachers</p>	<ul style="list-style-type: none"> • % of teachers conducting self-care • % of teachers being able to manage teachers and home priorities • % of teachers who feel they have support from their coach/colleague • % of students attending meetings • % of contacts made by building administrators to teachers 	<ul style="list-style-type: none"> • Virtual team meeting check-ins and logs • Administrator contact logs • Continue to meet with coach • Teacher survey data
<p>Network Health</p> <p>Purpose: Keep morale high, understand the problems and struggles</p>	<ul style="list-style-type: none"> • Identify bright spots • Identify problems to solve • Sharing key learnings and insights • Teacher feedback survey 	<ul style="list-style-type: none"> • Network leads and principals meet daily - allowed for issues and feedback to be surfaced and shared with the rest of the org • Streamline principal and teacher communication - director of schools send a daily email pulling information from functional teams. • Content teams update a google doc with updates, resources or content changes. • Survey dedicated to understanding strengths and needs of teachers during virtual school

One School's Story

Summit Public Schools has 15 public charter schools in California and Washington state. Summit launched virtual school on March 17th. During the time of COVID-19, Summit has identified **three basic metrics** during virtual school that measure basic implementation before the quality of teaching. These three metrics include Attend | Engage | Learn. Each metric is broken down by students and teachers. Learn is currently blank, as the focus for the first version of Virtual School (March 17 - April 17) has been primarily on implementation (Attend and Engage). Each of these metrics and their corresponding measures are captured on a google site that connects to their online learning management and student information [platform](#).



Attendance is taken through goal setting:

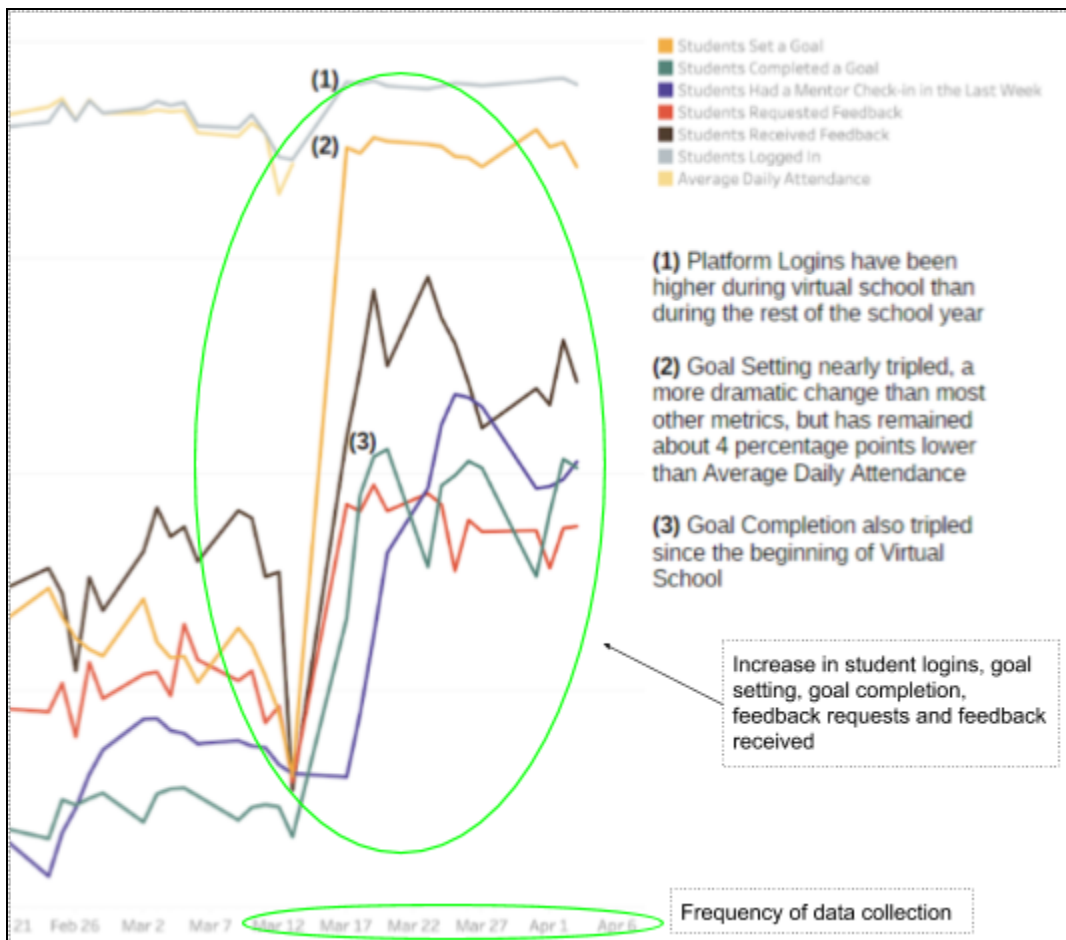
Attendance is taken daily based on students logging into the schools’ platform and setting an academic or habits goal. Goal setting happens at least 1x daily. Students set goals in 2 main settings, including:

- **Morning check-ins:** Mentor (advisory) teachers either set a goal with students or communicate the expectation of setting a goal as a whole group or during a 1:1 check-in via zoom/google hang-outs.
- **Core instructional times:** Students are still on a similar bell schedule; therefore, the student may be asked to set a goal at the beginning of the instructional period based on what they will complete for that class or the remainder of the week.

Engagement is measured for both students and teachers:

There are a few ways in which Summit measures student engagement during virtual school. These include feedback, 1:1 check-ins, and teachers' editing plans.

- **Feedback:** Through the platform, once students have completed a portion of a project or finalized a project, they can request feedback from their teachers. Daily student requests for teacher feedback have significantly increased since virtual school began, as has the rate at which teachers are providing feedback to students.
- **1:1 Check-ins:** Mentors (teachers) engage at least one 1:1 check-in with each student in their mentor group weekly. These check-ins range from 10-20 minutes and are dedicated to academic check-ins and making weekly plans as well as conducting a social-emotional check-in. Each check-in and student plan are saved in the learning platform.
- **Editing Plans:** Teachers are expected to track and edit lesson plans within the platform based on student data.



Key Learnings Based on Data

- More students are logging into the platform during virtual school
- More goals and more goal completion during virtual school
- More feedback requests and more feedback is given daily
- These successes can be built on in SY20-21 to maintain positive trends when transitioning back to school.

When and How is Data Reviewed and Proactively Utilized?

Schools have the autonomy to conduct data dives and structured improvement conversations in meetings such as weekly Grade-Level Team (GLT) and Leadership Team meetings based on their schools' needs, areas of focus, and context. Generally, School Leaders review these metrics daily, and Summit's leadership team (Superintendent and Directors of Schools) review the data weekly. At each level, goals are made and progress towards those goals is tracked. Progress is celebrated and changes are introduced based on best hypotheses to improve the data day-over-day and week-over-week in ways that are aligned to Summit's beliefs and values around personalized, self-directed learning.

- **Grade-Level Team Meetings:** Some schools have identified a group of students in GLT that are struggling to engage (attendance or performance). Teachers and school leaders come up with a plan in

weekly [GLT Meetings](#) to support those students. These plans can include reaching out to families and ensuring the student is attending office hours.

- **School Leaders:** Using Summit's data portal to review data trends on engagement and attendance. If there are specific student behavioral needs, teachers have continued to follow the same protocol as if they were in the physical school setting. Teachers fill out a google form, which goes directly to the School Leader. Based on data from the google form, the School Leader immediately follow-ups with the students' family. The follow-up looks like calling families and talking through a plan to support the student in getting back on track.
 - This google form can include: Teacher name and classroom, student name and observable behavior student exhibited, documentation the teacher went through all classroom management and expectations prior to requesting SL support (written description, checklist, other), and then clear documentation of follow up with the student and family should be added.
- **Leadership Team:** Also called the Virtual School Steering Committee, they utilize Summit's dashboard that tracks the three metrics mentioned above as well as other data. They continuously support school leaders through coaching and almost daily check-ins to take aligned action. They look at the data points both at a high-level and data collected daily.

Summit is in an iterative process of evaluating the needs of students and families. There are students in a variety of groups, including:

- Students who are thriving in the virtual setting
- Students who need minimal teacher support and direction
- Students who are struggling to engage and attend
 - In these cases, Summit is specifically thinking about what kinds of personalized paths and plans are equitable and make the most sense for these particular students.

Working on Equitable Technology Distribution

- Summit sent out a survey to students regarding internet access.
- The survey data was insightful, but there is still a concern about ensuring students have what they need resources to engage in virtual learning. Individual sites are monitoring and providing support.

What are Pain Points and Key Learnings:

- Outcome level measures such as SBAC, ACT, SAT will not be in place this year, which will make data over time challenging to measure growth for this school year as there will not be benchmark data.
- Based on disaggregated data on engagement and attendance (see table above), students with IEPs, students who are English Learners, and students who are socioeconomically disadvantaged seem to have a more difficult time engaging in distance learning.
 - Schools are thinking about reinforced parent messages, implementing short breaks and chunking lessons to support improvement.
- Math class was more difficult to transition to virtual learning
 - Teachers did not have manipulatives at home
 - Windows have been converted to whiteboards
 - Teachers had an app where they projected what they were writing from their phones that connected to their computer screens
 - Students have been showing work on Desmos

- Equity issues around providing access to instruction with the knowledge that students come from a variety of home contexts
- Summit has seen a positive trend in work submission and quality due to increases in students requesting and teachers providing daily or weekly feedback.

Learning Management Systems

A Learning Management System (LMS) is a software application for the administration, documentation, tracking, reporting, and delivery of educational courses, training programs, or learning and development programs, as different from a Student information System (SIS) that only collects data. An LMS provides support for training, sharing knowledge, and learning.

Specific Features of Common LMS:

- [Blackboard](#)
 - Informed data-driven decisions by tracking, analyzing, and monitoring learning performance in your classroom, school, or across your district in real-time with purpose-built analytics and data visualization for education.
- [Google Classroom](#)
 - Distribute, organize and collect assignments, course materials, and student work. Teachers can use the platform to post announcements and reminders and it's easy to see who has and has not completed their work. Teachers can also check in with individual students privately, answer their questions, and offer support. Teachers can provide immediate feedback on assignments and create quizzes and tests using google forms which automatically can get graded.
- [Canvas](#)
 - Allows schools to build digital learning environments. It simplifies teaching and evaluates learning by using easily accessible technology. Canvas targets higher-education and K-12th grade.

Additional resources can be found [here](#).

Additional Online Educational Sites:

During this time of virtual school, accessing education websites that can individualize instruction for students and collect data can be very useful for teachers. Below are a handful of online ed-sites that can increase student engagement and the ability to collect data more frequently and in real time.

- Reading
 - [ReadWorks](#) - Free online stories that can be read online and sorted by grade-level. Readings can also be read out loud and printed. Readings are paired with questions to support independent or guided work at home.
 - [IXL ELA](#) - Free online adaptive and interactive educational website. Personalize work based on student grade-level and content/subject.
 - [Tween Tribune](#) - Free online newspaper of current events, tailored to students ages 8-15.
- Writing
 - [IXL ELA](#) - Free online adaptive and interactive educational website. Personalize work based on student grade-level and content/subject.

- Math
 - [IXL math](#) - Free online adaptive and interactive educational website. Personalized work based on student grade-level and content/subject.
 - [Education.com](#) - Print out or find types of problems to write down for students to complete.
 - Desmos - Interactive mathematics content aligned with state standards.
- [SeeSaw](#)
 - SeeSaw is not a Learning Management System, however, it is able to collect data and engage students and their families. SeeSaw targets the partnership between teachers, students, and families. It's a platform that increases student engagement. Students have the opportunity to create, reflect, share, and collaborate with peers. They show what they know using photos, videos, drawings, text, PDFs, and links.

More to Come

Conditions are changing rapidly. As we continue to learn more, this resource will be updated. Below are some key questions that have been identified as a priority.

- How are teachers receiving support for facilitating virtual learning?
- What are effective ways to monitor student engagement?
- How can schools better implement Universal Design for Learning to target the needs of struggling students and their peers?



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