Accelerating structural and systemic change in K-12 education: Insights from Colorado Educators



INTRODUCTION

"Teaching is experiential... Who can I look at to learn from, what can I risk? You have to learn your groove, you have to learn how you teach... I gave up on trying to be a good teacher and focused on how can I be better." —Adrian Parker, Denver Schools of Science and Technology, Chemistry, 10th grade

"[The pandemic is] making teachers be a little more flexible in their thinking and be more open."—Jason Cianfrance

This is the year of COVID-19. Since March 2020, schools have been faced with a new reality for which they were not prepared. New terms entered the lexicon of teaching: synchronous and asynchronous learning; remote and hybrid learning. Some schools made hard copies of worksheets and had families pick them up or had them delivered. Other schools scrambled to quickly train teachers on how to use teaching platforms like Schoology, Florida Virtual, and Google Classroom. It was a classic "build it as you fly it" approach to teaching and learning. The pandemic also brought increased scrutiny to the inequities that have plagued our system of education, including access to technology and broadband, the dearth of mental health support for students, the challenges of differentiating based on learning goals, as well as the challenges families faced as they struggled to find child care for younger children who were learning at home.

But as teachers returned to teach remotely in the Fall of that year, and considered their experiences in the Spring, they began to turn the adversity of the pandemic into new and innovative ways to teach. The pandemic has ignited a spark among teachers to reimagine education.

"Instilling the willingness to be flexible, to be reflective on your practice, to experiment, the willingness to rely on your colleagues, if you could design a system where people had a mindset of reflection, flexibility, and willingness to try new things, you would start seeing things shift." —Jason Cianfrance

We're a group of Colorado classroom teachers and Teach Plus Colorado Policy Fellows. In August 2020, we embarked on a journey to gather the stories of highly qualified educators from across our state. From these COVID experiences, we gathered ideas for how the pandemic could help accelerate structural and systemic change to K-12 education.

METHODOLOGY

Once we identified diverse teachers from across the state to share their stories, we focused on building relationships with these educators so they could freely share their experiences. We interviewed teachers for one hour in the Fall and one hour in the early Winter, using questions to inspire reflection on progress and innovation. We gathered one more time in March as a whole group to reflect on the connectedness and shared themes of their stories. In all, six teachers with 50+ combined years of experience provided insight into their teaching. Our interviewees were:





- + From the urban, high FRL schools in the Denver area, we interviewed Chris Hooyman, an elementary teacher with three years of experience; Mai Pham, an elementary teacher with 15 years of experience; and Adrian Parker, a 10th-grade chemistry teacher with two years of experience.
- + In the Denver Metro area, at Adams 12 School District, Jason Cianfrance, a high school math teacher, gave us insight through a lens of 25 years of experience.
- + From a rural community, Nicole Melby, an experienced PK-5 and K-1 teacher shared her experiences working with young children in hybrid and remote environments. In another rural part of the state in a Title 1 K-8 school, an experienced ELD teacher, Luis Portillo, spoke about the connections that technology made possible between his students and their families.

KEY THEMES

Several common themes emerged in our conversations with the teachers, regardless of their subject or years experience. From rural Colorado to Denver, we heard from teachers that access to families and students is more important than ever. Providing equitable access to technology; fostering relationships with students and families and creating a safe environment for students; and rethinking assessment structures stood out as some of the lessons of teaching during the pandemic and levers of change to reimagine the system.

Technology

Recommendation #1: Normalize and ensure equitable access for students, teachers, and families to the internet, computers, virtual platforms, and successful working environments.

Ensure students have access to technology and online resources

The pandemic heightened the fact that many students did not have access to the technology needed to be successful during remote teaching. DSST: Conservatory Green High School, an urban charter in Denver, undertook several measures to ensure access, from setting up hotspots at homes to connecting to families and ensuring their access to wifi and laptops. Adrian Parker, a 2nd year 10th grade chemistry teacher, underscored that access to technology and online curriculum was a necessity for academic opportunities. Adrian named that a key lever in his classes has been a virtual library of lessons and materials for students to access at any time. "Access to materials is still a number one priority... I was shocked by the number of students that thrived because they had an opportunity to access the materials when they needed to. By providing students with the materials and the option to gain the stuff that they missed is so awesome. Teachers, at least at the high school level, need to start recording their lessons. There are so many possibilities for using the virtual world and leveraging that for teachers."

Acknowledge the Need for Broadband

Even with access to hotspots, gaps and disparities remained. Students on the lower end of the socioeconomic spectrum were more likely to have to share devices with family members than wealthier students, thus diluting the small amount of bandwidth. Mai Pham, a 3rd grade Denver Public school teacher said: "I know the district



provided some hotspots but... even with the hotspot some of my students cannot get online." Mai, as others, faced the issues of internet access when teaching her students. She noted that mobile hotspots were not provided at all levels across the district, and even when they were, were often not effective enough to allow students to access video and multiple platforms simultaneously.

Recognize that Reliable internet Leads to Greater Student Engagement

Chris Hooyman, a 5th grade teacher from Denver Public Schools, connected the lack of reliable internet access to a lack of student engagement: He noted that many systems didn't have the capability to run Google Meet, stay signed into educational platforms, and use their cameras at the same time. Though the internet can be a great tool for students, its unreliability could have a negative effect on student engagement, especially affecting most in-need families. Access to high-speed internet and devices capable of running multiple programs are not luxuries anymore, but are necessary to developing 21st-century students and setting them up for success.

The Upshot

Normalizing and ensuring access to the internet, computers, virtual platforms, and working environments is the new revolution in education. When students who watch siblings or who have children of their own have the ability to get work done on a flexible schedule, many doors open to them. By providing platforms that don't seek to cater to the elite, we lower the barriers to education, success, and communication.

Family Connections

Recommendation #2: Designate frequent and consistent time for teachers to connect virtually and provide the tools and resources that families need for their children to be successful in their education.

Allow Time for Consistent and Direct Contact

Even amidst the transitions and challenges of the pandemic, every educator we spoke with mentioned the opportunities to improve connections with students and families as a result of distance learning. Educators noted that the challenges of learning from home also opened up new opportunities. Many teachers were able to build stronger relationships with students' families because they needed to be in direct, consistent contact with them in order to ensure that both the families and their students had what they needed to be successful. "We are not only working with kids; now, we are coaching parents," said Nicole Melby, a rural elementary school teacher, reflecting on her strategic conversations with parents.

Leverage Virtual Meetings

Adrian Parker recognized that the biggest loss from COVID and virtual teaching was the relationships created via student interactions. To counteract this, he used distance learning and the ease of virtual meetings as an opportunity to engage more directly with families. "I had a [virtual] parent-teacher conference recently with one of my students' parents and she felt really comfortable sharing a lot of things that had been happening at home," he explained, "We worked together to make a plan to motivate this student to get back into it . . . and because I think she





was at home it was a more comfortable situation versus sitting in a classroom, and so I think comfortability has definitely opened up parents [and students] to more and more communication." Adrian is hopeful that strategies used to improve family relationships during the pandemic will lead to more equitable family engagement in years to come.

Insist on Direct and Flexible Communication

Jason Cianfrance, a Denver-area high school math teacher, said that he has had more parent contact during this year than in any other. His approach to family communication was centered on efficiency and accountability. "I will see that a kid isn't doing what he is supposed to be doing... so I called home and asked, 'are you home with your kid? Because he is not doing what he is supposed to be doing,' and [it's an] immediate fix." Other teachers, meanwhile, focused more on using the flexibility of distance learning to facilitate more scheduled opportunities to meet with families. Luis Portillo, a rural ELD teacher, described setting up specific meeting times for families and students to discuss any questions or concerns they had in regards to their assignments: "I have more relationships with [parents] now that we have created this relationship in order to be in touch and let them know about their children's performance in school."

The Upshot

Studies have consistently shown that family engagement is highly correlated to student success and this year was no different. The pandemic provided a bridge for families to connect with teachers as schools gave dedicated time for family outreach. Technology allowed parents to connect from the comfort of their home or during lunch hours, reducing several common communication or transportation barriers. Intentional time to reach out to students and access to platforms were two of the most influential levers identified for communication success. Schools that set aside time to support families with technology and dedicated resources to family engagement saw the most success.

Assessment

Recommendation #3: Utilize technology to allow teachers to provide timely and effective feedback and students the flexibility to display competency in a variety of modes.

Recommendation #4: Prioritize standards to account for whole student learning and mastery of content.

Focus on Mastery of Content vs. Recognition and Recall

Traditionally, teachers have created curriculum and lesson plans with the end in mind: Start with the standards and what you want students to know and be able to do, then create assessments to evaluate the students. With many students virtual in the fall and spring, many teachers realized early on that the assessments created for in-person school environments were less valid evaluating virtual learning because they relied too heavily on content memorization. In addition, teachers realized that their students encountered a brand new learning environment that necessitated developing a completely new set of skills such as explaining and showing work



virtually and accessing notes to activate prior knowledge to alleviate the temptation to Google. How could teachers assess these new skills that traditionally had been seen as "soft skills?"

Jason Cianfrance realized early on that students were using math apps on their phone to scan and solve math problems. At first, Jason and his math team tried to come up with ways to beat the technology, but they realized that they were asking the wrong type of questions. "We spent too much time trying to outsmart students who were gaming assessments using apps like Photo Math. The lesson learned was to use unique exam questions that required students to apply and not just regurgitate what they knew. We will bring this back to the classroom." Assessments need to address a depth of thinking in addition to rote memorization.

Differentiate in Assessment Type (Using assessments differently)

During remote learning, teachers we spoke with were able to leverage the online environment to differentiate much more effectively than when in person. Teachers were able to allow other students to move on while providing targeted instruction for students who needed it. Jason Cianfrance, came to the realization that assessments should not signal the end of the unit. "Assessments, even those we typically had viewed as summative assessments, became much more formative because I had the ability to use learning as the constant versus time as the constant." Teachers started thinking of how to truly show students knew the skill. With the ability to Google or have access to notes, the use of open-ended, application-based assessments became more informative and pushed the students to think critically. Additionally, teachers were able to use one problem or question to assess multiple learning standards and evaluate the students on a continuum of problem-solving skills. Adrian recognized that we need to eliminate assessments that don't contribute to 21st century needs. With flexible assessments, students can develop skills along the learning continuum based on their needs.

Prioritize Key Standards that Lead to Whole-Student Learning

Most of the teachers we interviewed said they were relieved to have fewer mandated standardized assessments. But while they were pleased with the reduction in standardized academic assessments, they felt that since students were learning an entirely new set of "soft skills" like time management and self-advocacy, it would be helpful to report on the progress with these skills. Chris Hooyman reflected on how "so many students have been asked to be more responsible and this year how can we check on their resiliency, grit, and other character traits." Similarly, Nicole Melby felt that she could "allow students to struggle more and therefore learn." Remote learning, for many students, shifted the ownership and agency of learning to the students. How can we balance the need for academic learning with the need for social-emotional learning?

The Upshot

If there were ever a moment to rethink assessments, now is that time. As we continue to recognize the need to address the whole child in our classrooms and schools, our assessments need to reflect this shift. Focusing on key standards allowed for teachers to narrow practice on the deep skills and knowledge students need to effectively progress on a learning continuum.





CONCLUSION

Through a collection of stories gathered from Colorado teachers with various experiences and backgrounds, three consistent themes emerged for reimagining education: technology, family connections, and assessment. Access to broadband and technology is no longer a privilege, but a necessity. Stronger family connections need to be intentional and prioritized by schools. Rethinking assessments and focusing on key standards allows for whole child learning—including social emotional skills alongside mastery of content. As the author Arundhati Roy set the stage: "Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next."

