BLENDED (R)EVOLUTION:

How 5 teachers are modifying the Station Rotation to fit students' needs

BY CLIFFORD MAXWELL & JENNY WHITE

JULY 2017

EXECUTIVE SUMMARY

The practice of blended learning in K–12 schools has grown immensely over the past several years as school and district leaders have adopted technology with the goal of personalizing learning. Yet, the unfolding of the practice itself—exactly how blended instructional models change and evolve to meet the goals of personalization—happens at the micro-level. In numerous classrooms, innovative teachers constantly identify and pursue new ways to adjust, bend, and break open instructional models to optimize the learning process for their students.

At Bella Romero Academy, a K–8 public school in Greeley, Colo., and in several schools in the District of Columbia Public Schools, the blended-learning journey launched with the adoption of the Station Rotation model around Fall 2014. Since that time, teachers have modified the Station Rotation to address various student needs. Though each classroom looked similar just a few years ago, today their many differences reflect each teacher's willingness to innovate and adapt to the unique needs of their students.

Mallory Mattivi: A 7th-grade English language arts teacher at Bella Romero, Mattivi has evolved her model from a daily Station Rotation to a Flex model that is interspersed throughout a two-week instructional cycle consisting of whole-group and small-group instruction, one-on-one conferences, and collaborative projects.

Angela Jones: A former 4th-grade teacher and now teacher coach at Bella Romero, Jones sensed a need for change when her model's fixed amount of time for learning software was either too much or not enough for many students. She now helps some teachers manage a less rigid approach to timing on stations, and others implement individualized playlists within a Flex model.

Diane Johnson: A 5th-grade math teacher at Orr Elementary, Johnson's Station Rotation is still intact, but with a few key adjustments to space and pace. With an opportunity to set their own learning goals week to week,

students in Johnson's class are building the skills necessary to direct their own learning.

Milton Bryant: A 5th-grade math teacher at Ketcham Elementary, Bryant had no plans to change his Station Rotation model until he had a chance to observe innovative classrooms across the country. Now, balancing structure and student choice, Bryant maintains stations three days a week, but gives students two Flex days to move through content at their own pace.

Kaila Ramsey: Having recognized her students' self-awareness regarding their personal learning goals, Ramsey, a 4th-grade math teacher at H.D. Cooke Elementary, infuses choice into her rotations by offering students a myriad of activities to select from at each station. After incorporating goal setting, peer-to-peer instruction, and dedicated days for various learning activities, Ramsey is headed toward a Flex model where students move through content on a customized, bi-weekly playlist.

The teachers at Bella Romero Academy and DC Public Schools are not done innovating. Each is continuously adapting the instructional model to create improved degrees of flexibility, differentiation, and student agency. This unrelenting commitment to model change—not for change's sake, but for the students'—offers an important lesson for blended educators aiming to personalize learning in their classrooms.

INTRODUCTION

Long before the advent of education technology, many educators, particularly at the elementary school level, rotated students among "learning centers"—self-contained sections of a classroom where students could engage in various independent learning activities.[1] Part classroom management tool and part pedagogical strategy, learning centers presented an opportunity for teachers to help motivate students who struggled in a whole-group setting, as well as to provide students different representations of the educational material.[2] Some teachers implemented learning centers in their classrooms as an optional support for particular groups of students, whereas others rotated all students through these centers. An early form of blended learning[3]—online learning in a school setting—emerged when teachers adapted these centers to include technology. This led teachers to replace an existing learning center or add a new one with internet-enabled devices that could deliver online content such as practice drills or adaptive tutoring. The Christensen Institute first defined this blended phenomenon in 2012 as the Station Rotation model of blended learning.[4]

The Station Rotation is:

> a rotation-model implementation in which within a given course or subject (e.g., math), students rotate on a fixed schedule or at the teacher's discretion among classroom-based learning modalities. The rotation includes at least one station for online learning ... and students rotate through all of the stations.

The Station Rotation differs from other rotational models of blended learning: it includes fixed schedules in which all students rotate to all learning stations. Oftentimes, a Station Rotation classroom is set up with a timer; at the sound of the alarm, students rotate to the next station. Classrooms may have two, three, or more learning stations, but regardless of how many stations there are, all students rotate through every station within a fixed class period.

This model, in particular, has proven to be a staple in schools across the country.[5] In part, its popularity reflects its familiarity given the long history of learning centers. Adopting the Station Rotation model is also a boon to teachers' ability to differentiate instruction. By dividing the class into groups, teachers can work with students in small-group settings on a daily basis. This unlocks time for teachers to individualize instruction for students at varying levels of mastery. Dedicated time in an online station also gives students an opportunity to receive targeted and, in many cases, adaptive instruction, as well as provide an engaging environment in which to practice core skills. When implemented well, the Station Rotation model has helped thousands of students see a marked increase in academic achievement.[6,7]

Although still a relatively nascent field, blended learning is now part of the school experience for approximately 9 million students nationally,[8] and for some schools it has been a core component of instruction for at least half a decade. In an effort to catalogue and point to examples of schools implementing the Station Rotation and other models of blended learning, the Christensen Institute began capturing school- and district-level profiles in the Blended Learning Universe (BLU) school directory, which currently contains profiles of more than 500 blended schools and districts worldwide. Over the last 18 months, educators across the country have updated their BLU profiles to reflect how their programs have changed from year to year. In some of these instances, the Station Rotation model remained largely intact with minor changes—in others, the model was transformed into something entirely different.

What follows is an in-depth look at how and why seven educators in two districts are fortifying, iterating on, and, in some cases, moving away from the Station Rotation model. This case study neither evaluates nor prescribes modifications to the Station Rotation, nor does it attempt to present the practices of a few as a clear trend witnessed across the K–12 space. Instead, we offer a detailed look at the changes that these seven district teachers have made over time to their Station Rotation programs. Most importantly, these case studies shed light on innovative practices that may help others looking to expand or refine future iterations of the Station Rotation model in their own schools.

Bella Romero Academy of Applied Technology is a K–8 school spread across two campuses that serves 1,130 students in the Greeley-Evans School District in Colorado. The suburban school serves a majority Hispanic population, with 93 percent of its students receiving free and reduced-price lunch (FRL) and 55 percent identified as English Language Learners (ELL).

AT A GLANCE

1,130 Total Students
93% FRL
55% ELL

STUDENT ETHNICITY

81.7% Hispanic
11.1% White
7.1% Black
0.2% American Indian/Alaska Native
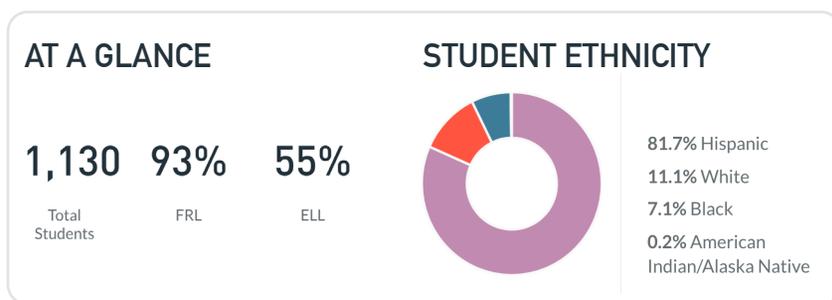
Jon Cooney and the leadership

Bella Romero Academy

Four years ago, Bella Romero principal Jon Cooney faced a pivotal and chronic challenge at his school: static student growth. "We were one of the schools that had a really tough time hitting the right metrics and succeeding on federal and state indices," Cooney said. "Kids were doing a nice job, teachers were working hard, but we couldn't dramatically tip the needle. That kind of problem puts you in an entrepreneurial mindset."

In a bookstore one day, Cooney stumbled upon the book *Disrupting Class*, which chronicles the rise of online learning in K–12 schools and predicts that, with the right models, technology can offer inroads for customizing learning to each student's needs and strengths.[9] After reading the book, he shared it with a colleague, Jenny Henriksen, who at the time was a science and technology teacher at Bella Romero. The book inspired Henricksen to change up her own classroom practices, and the following year she began operating a Flex model of blended learning[10] in her science class. In that model, students moved through curated online content at their own pace and on their own path.

"I jumped right into a flexible model because that is what I felt was best for kids at the time," Henriksen said. "I did not want [my students] to be constrained by a timer to move from station to station. I wanted them to get the support they needed at the exact moment they needed it."

Henriksen started her new model with instructional videos and assessments she uploaded to Schoology, a digital learning management system, and simultaneously built extra pathways for students who were not progressing or needed extra help. The Flex model marked a dramatic shift away from the traditional classroom in which she had routinely delivered whole-group instruction. For Cooney and Henriksen, the transformation was exhilarating. But they soon agreed that the model demanded adjustments to scaffold in the support structures that students were accustomed to in traditional classes. "We found that kids enjoyed the idea of being in the driver's seat," Cooney said. "But that was the biggest challenge: it was hard to guarantee their learning. It was difficult to ensure kids were developing competency before moving forward, and we didn't have tight enough feedback loops when students were all moving at their own pace."

Henriksen shared Cooney's concerns. "Going blended that first year was full of positives and then also surprises that I did not anticipate. I did not foresee that some students would not excel in this environment," Henriksen said. "In a blended environment there is always more work to be done. With every problem of practice came a new system that I would put into place, that would therefore create a new problem of practice. I was constantly cycling through the design process in my teaching."

> "We found kids enjoyed the idea of being in the driver's seat, but that was the biggest challenge: it was hard to guarantee their learning. We didn't have tight enough feedback loops when students were all moving at their own pace."

As part of these cycles, Cooney supported Henriksen as she began to incorporate structure back into her model that could provide students with consistent feedback loops. First Henriksen added exit tickets to check students' individual understanding at the end of each class. She also found the need to provide some occasional teacher-led, "anchor" lessons and began to build in time for more frequent student-teacher conversations about each student's path and progress.

Keen to try making her own classroom blended, another 7th-grade teacher started toying with blended learning in her English language arts class. Like Henriksen, this teacher began scaffolding content on Blendspace—an online platform where teachers and students can collect, annotate, and share online resources—and then releasing students to work online on assigned content and practice. To Cooney and his assistant principal Ashley Aragon, this teacher-led momentum toward blended learning justified school-level action. They recognized that the school needed a philosophy for personalization as well as a way to scale new practices. They collaborated with Greeley Schools's director of instructional technology Deagan Andrews to establish Bella Romero's partnership with Education Elements, an education consultancy. With the support of Education Elements, Bella Romero could systematize blended learning beyond early adopters like Henriksen. Teachers in grades 6–8 adopted a Station Rotation model in the first wave of Bella Romero's blended learning roll-out during the 2014–15 school year.

For Cooney, the Station Rotation was a feasible first approach to scaling blended learning, as most teachers were already familiar with rotating students through activities. But that feasibility, Cooney observed, also hindered some teachers from adopting wholly new instructional mindsets. "For a teacher who is used to stations, going to a Station Rotation can be an impediment because they introduce it with the scheme of 'this is what I have always done'," Cooney said. "It becomes harder to convince that professional that we are talking about really making changes to pace and/or path depending on the student."

After a few months with the Station Rotation in place, Cooney worked to help his teachers climb out of their comfort zones, enthusiastically preaching for them to iterate their models constantly. "I thought that iteration was improvement. I was pushing people to iterate," Cooney said. "If I saw a teacher with something different every few weeks, I felt that was good, and that was my preference."

But Cooney soon realized that he needed to refine his own tack. He noticed a continuum of teacher mindsets at Bella Romero: at one end of the spectrum, some teachers tended to maintain their model with few to no modifications, and at the opposite end, others updated their model every week. Taking in the whole picture, he realized that instead of simply calling on teachers to iterate, he needed to encourage iteration in moderation so that teachers had time to not only make changes, but also refine them for the sake of making the model as effective as possible for students.

"[Now] I am slowing down people on the iteration rampage and trying to do a better job at challenging assumptions with teachers who are prone to stick to something," Cooney said. "My approach is, 'don't iterate so fast; get good at something and give it a solid chance before you say it doesn't work.'"

To anchor this process of "iteration in moderation," Cooney focuses on three core classroom practices: student agency, tight feedback loops, and targeted instruction. Today, teachers iterate upon the model with the goal of bolstering these three practices. For some teachers, this process has unlocked innovations within and beyond the original Station Rotation model.

Mallory Mattivi, 7th grade

Bella Romero Academy

One of the teachers along for this blended journey was Mallory Mattivi, a 7th-grade English language arts (ELA) and world history teacher at Bella Romero. Mattivi was initially tentative about introducing blended learning into her classroom. She felt that blended learning made sense for math classes, but that ELA was more centered around reading together, having class discussions, and thinking in groups—activities that she thought wouldn't work as well in smaller groups.

When Education Elements began working with Bella Romero, each teacher had the opportunity to design her own classroom and select online content for her new instructional model. Mattivi created a Station Rotation that consisted of three stations: an online station, where students took adaptive reading diagnostics using i-Ready, a reading station, where students read a text and answered questions about it, and a writing station. Each student spent 20 to 25 minutes in each station before rotating. The timed rotations made sense to Mattivi as she tried to ensure that every student kept up with the content and standards built into the ELA curriculum. Notably, Mattivi never included a teacher-led station in her model because, during rotations, she was preoccupied with classroom management.

"That first year was more about making sure that kids were engaged and doing what they needed to do at each station," she said. "I wasn't ready to let go of that control and go into a teacher station."

As students worked independently in each station, Mattivi floated among students, providing in-time support to individual students as needed. Discerning which students needed additional support, however, proved to be one of the greatest challenges she faced that first year. Some of her students would have benefited from a slower, more flexible pace, but the lock-step rotations often did not grant them the extra time they needed. As a result, some students consistently fell behind on assignments.

"A lot of the first year was a struggle," Mattivi said. "I didn't have a good system for catching up kids when they needed to be caught up on certain skills. They were falling behind, and I just felt, 'What can I do differently?'"

In an effort to tackle these gaps, Mattivi spent her first year making adjustments to her Station Rotation. To provide students more time on writing, she trimmed down the rotation to two stations and let students set their own goals for the day. She provided each student with a checklist of i-Ready assignments and reading/writing assignments for the quarter and at the start of each class the students selected which assignments they would complete that day. Mattivi

---

SY2014–15:

First day of school: Three stations: i-Ready, independent reading, independent writing assignments

Late fall: Two stations: i-Ready and independent work; students set goals

Winter: Online station plus flex time; students work through quarterly checklists

Spring: Rotations again but students choose path and goals; students prove mastery before moving on to new station

SY2015–16:

First day of school: Bi-weekly mini-assessments

Spring: Collaborative project days

SY2016–17:

Bi-weekly cycle that includes small-group time, collaborative projects, whole-group time, student-teacher conferencing, online learning

found, though, that some students underestimated how much work they could accomplish and were not able to self-motivate to set higher goals and complete their tasks at an efficient pace.

"A lot of the students' work was improving, but the model was hard," she said. "Students were turning assignments in at random times, which made small groups difficult to bring together at any given moment because I wasn't sure where they were. It took me a long time to develop that model."

With an excess of choice and a lack of structure, not all students could manage to stay on track with the content. Mattivi decided to put more checks in place and to tighten feedback loops to ensure that fewer students fell behind. Instead of students independently moving through their checklists, she sat down with each student to offer individual feedback on an assignment before the student moved on to the next task. With regular check-ins, Mattivi was able to keep students on track while giving them the space to pace their own learning.

As Mattivi improved upon her model to better manage individual student pace and feedback, another area started to become noticeably lacking: peer-to-peer interaction.

"After conversations with Jon [Cooney] and others, I realized the lack of [student] collaboration was a significant hiccup in the early stages of my model," Mattivi said. "Students were so eager to communicate that the classroom environment became loud with unfocused conversation, and lacking the learning students could receive by working with their peers."

To address this challenge, Mattivi started to incorporate "collaborative Mondays," during which students worked on projects in groups based on the learning standards they were working on that quarter. After seeing the benefits of quality student interaction, Cooney realized this needed to be an essential component in all of Bella Romero's blended classrooms. His "big three" pillars of blended design (student ownership, tight feedback loops, and targeted instruction) became the "big four," adding peer-to-peer interaction as another crucial tenet of the work.

Despite her progress, Mattivi felt that there was plenty of room for improvement. Over the summer, she had time to reflect on what was and wasn't working in her model and then dedicate herself to implementing true improvements. Starting in Fall 2016, she held onto the checklists of assignments but, to further tighten the feedback loop, she integrated bi-weekly mini-assessments based on the learning standards students focused on during that period. Mattivi now uses the results from those mini-assessments to pull small groups of students based on need.

These shifts have radically changed the lockstep choreography that previously guided Mattivi's Station Rotation model. In fact, she has stopped rotations altogether in an effort to provide students the flexibility and choice to choose their own path through the checklists. Instead, she has established a rhythm to the class in another way: by organizing the structure of each class by days of the week. Specifically, her current model follows a cyclical schedule, which is included in **Appendix A**, that consists of: collaborative projects on Monday, a whole-class lesson on Tuesday, student-teacher conferences on progress and mastery on Wednesday, small-group work on Thursday, and individual work time and a mini-assessment on Friday. Nevertheless, Mattivi finds that students still rotate on a daily basis, albeit less formally, between online content and working through checklist assignments.

Today, Mattivi doesn't consider her model to be the "ideal." Instead, she strongly believes that every teacher and class of students need to experiment to find a model that fits their needs. Her current model is a work in progress. But she attributes her school's culture to her ability to push boundaries and strive for optimal ways to instruct her students.

"I don't feel locked to anything. I have a lot of trust from my administration so I am able to do things differently," Mattivi said. "Our instructional coach, Angela, is helpful for bouncing ideas off. We collaborate well here. Getting to [the right model] takes a lot of time and building the right school culture."

"I have a lot of trust from my administration. Getting to [the right model] takes a lot of time and building the right school culture."

Mallory Mattivi: Blended Learning Model Changes Over Time

7th Grade English/Language Arts Teacher • Bella Romero

Then
2014-2015

Monday - Friday

Online Instruction

Independent Reading

Floating Teacher

Independent Writing

Now
2016-2017

Key Change: Bi-weekly assessment informs small group instruction.

| Monday	Tuesday	Wednesday	Thursday	Friday	Week 2
Collaborative Activities and Projects	Teacher-led Instruction	Online Instruction Teacher Conference	Online Instruction Small Group	Online Instruction Floating Teacher	Mon: Collaborative Activities Tue: Online + Small Group Wed: Online + Teacher Conference Thu: Online + Small Group Fri: Mini Assessment
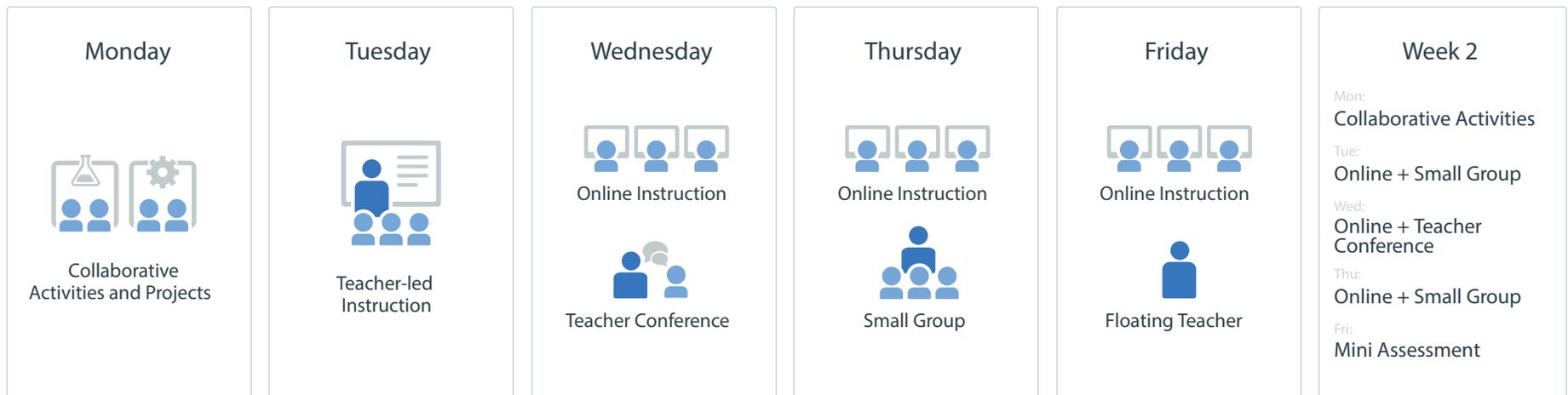
Angela Jones and the 4th-grade teaching team

Bella Romero Academy

The year after Mattivi began implementing blended learning, her colleague Angela Jones had the chance to pilot new approaches in Bella Romero's elementary grades. Prior to her blended-learning pilot, Jones had made the switch from teaching 6th grade to 4th grade and had started putting a great deal of effort into personalizing learning for her students despite the limited access she had to learning software and devices at the time. In these early personalized classes, Jones led with 15 minutes of whole-group instruction and then gave her students differentiated worksheets that broke down tasks by skills and subskills for each proficiency level. Yet, as Cooney would tell her, Jones found herself "hitting her head on the ceiling" without the boost from online content and devices to be able to truly personalize her students' learning.

When Education Elements partnered with Bella Romero, Jones recalled the excitement of new possibilities that the school leadership exuded and carried down to the teachers. During the 2014–15 school year, Jones and her cohort of 4th- and 5th-grade teachers were able to experiment with some of the online content that the middle school staff was already using.

For the 2015–16 school year, the elementary teachers, including Jones, adopted a uniform approach across their cohort: a Station Rotation model using the online math curriculum Zearn, the online adaptive reading assessment i-Ready, and the online reading and writing curriculum tool Achieve3000. For Jones, the clarity and structure of the new model proved appealing.

"There was just a sense of control and order about [the model]," Jones said. "No one was confident enough to try something new. We were seeking a recipe. Education Elements exposed us to a lot of different ways, but I remember feeling, 'Please just tell me what to do.'"

Jones welcomed the fact that the Station Rotation allowed her to track student progress in a way that she hadn't been able to achieve with her personalized worksheets. Along with some of her colleagues, Jones established a three-station model in her math class: 40 minutes of online content, 20 minutes of independent or collaborative learning, and 20 minutes working with the teacher. Jones said that they landed on 40 minutes of online learning because it was the suggested allotment from Zearn and the teachers lacked experience to determine how much time students should spend on the program.

SY2014–15:

Three Stations in ELA: Independent reading, small group, i-Ready

SY2015–16:

Three stations in reading and math: online station featured Zearn, i-Ready, and Achieve3000

SY2016–17 (Teacher Coach):

Flexible time within a station, teacher tutored and answered questions as needed

A Flex model with student playlists built by learning software

With time, however, Jones began looking for elbow room to break away from a strict schedule for math rotations. Like Mattivi, Jones felt that her students stood to benefit from greater flexibility within the model.

"When a student is struggling and not understanding the Zearn lesson, why am I putting them on 40-minutes online a day? It didn't work for all students," Jones said. "I realized we needed the flexibility to say, 'You're not going on Zearn for 40 minutes today. You are working with the teacher today, or you are working on a Khan Academy lesson today.'"

Though Jones found her time-based blended model did not meet students' needs perfectly, neither she nor her cohort had the bandwidth to develop a better model during the school year.

This past year, however, instead of improving her own classroom model, Jones helped her colleagues update their blended strategies. Serving as an instructional coach for Bella Romero's teaching squad, Jones and her colleagues found ways to iterate on the Station Rotation model by shifting practices to adhere to the student, not the model.

"As a teacher, I had been feeling like I had to make an instructional decision based on the station or the device availability," Jones said. "I was letting the structure of the Station Rotation determine my choices. Now looking back, we know better. We want to give students what they need, when they need it."

> "I was letting the structure of the Station Rotation determine my choices. Now looking back, we know better. We want to give students what they need, when they need it."

Jones helped facilitate two major model shifts this year among 4th-grade teachers. First off, they have addressed the fixed-time aspect of the stations. "There is nothing magical about having a student on Zearn for 40 minutes a day," Jones said. "This year, we're comfortable enough with the [digital] tools to make changes, and we're focusing on the students."

Some teachers still operate set rotation times, but when a student is struggling, the teacher pulls him away from the online station for tutoring. Other teachers assign small groups of students to targeted instruction, changing the groups daily as needed.

According to Jones, every student meets with the teacher at least every other day. In some cases this occurs in small groups. Alternatively, other teachers provide flexible time during the rotations when students may pause from a task to ask the teacher one-off questions. In their own ways, all of the 4th-grade teachers are adapting the Station Rotation model to ensure that every student practices a concept until mastery before moving on to the next unit of the online curriculum.

The second major model update that Jones has overseen is helping some teachers create playlists, which guide students through one "mission" or unit in the curriculum for approximately two weeks. Jones said the playlists are not typically personalized at the elementary school level, so most students share the same set of tasks within the playlist. For a few students in each class who show clear gaps in their learning, however, teachers supplement and customize the playlists to include assignments with below-grade-level content. Meanwhile, students who master a mission ahead of schedule have the option to advance to the next mission or work on an extension project.

Jones aims to support teachers to build blended-learning models in the manner that works best for both the students and the teacher. She finds that as a result there is much greater diversity across teachers' approaches to blended learning than when their cohort first launched the Station Rotation. "Even with really skilled teachers, their models are changing," Jones observed. "It is almost even more flexible now to be able to say, 'For this subject in this unit, I am using stations. While for this mission, I am using Flex.'" Some Bella Romero teachers move from the Station Rotation to the Flex model, which is driven by playlists rather than fixed rotations. Others find ways to individualize within the structure of a Station Rotation.

Then
2015-2016

Monday - Friday

Online Station

Small Group Instruction

Collaborative Activities

Now
2016-2017

Key Change: Teacher station has been removed to allow for flexible time.

Monday - Friday
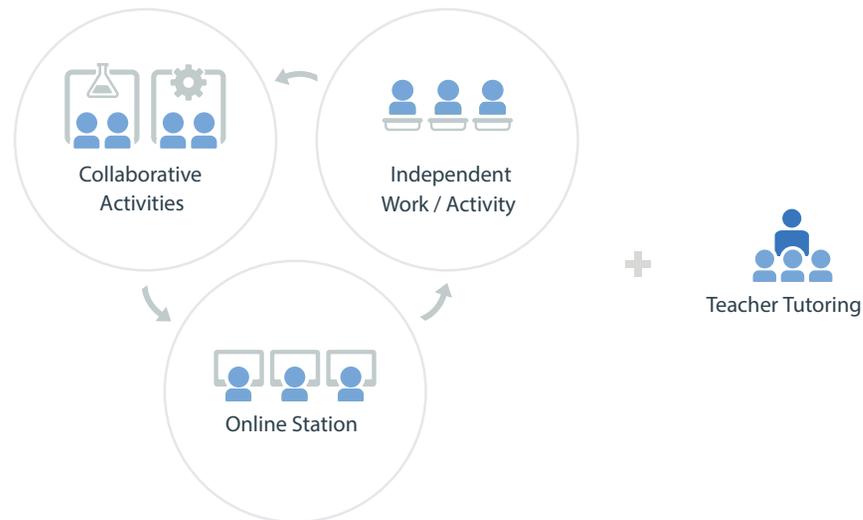
Collaborative Activities

Independent Work / Activity

Online Station

+ Teacher Tutoring

> "When you ask teachers today what model they implement, they'll respond, 'When?' Teachers have realized that the model used should be based on what they are trying to achieve."

Today, to allow for greater student agency or opportunities for students to shape their educational experience, many Bella Romero teachers are taking away the time constraints of rotations. Where all teachers once used a timer to move students along, some teachers now let students complete a station at their own pace. Tight feedback loops, or processes of checking for and affirming understanding, are made possible by online tools that track students' mastery of certain competency tracking and deliberate conferencing opportunities or time slots. Teachers analyze student progress and rearrange groupings no less than one to two times per week; and in math classes, teachers analyze data and change up groups daily. Finally, to target instruction at a more individual level, Cooney and his team no longer run teacher-led, small-group instruction stations. That leaves each teacher available to roam the classroom and pull out individuals or small groups of students who need intervention the most.

Mattivi and Jones's cohorts have benefited from belonging to a school-wide campaign to advance instructional practices. As Cooney explains, shifts in blended-learning practices at Bella Romero are the result of both "a push from leadership and grassroots adjustments."

In order to create a strong culture of innovation, Cooney works with his teaching staff to find a positive middle ground between a model with restrictions on time, pace, and place and a model that has too little structure to support students effectively through the learning process.

In his opinion, this poses a constant balancing act. "What is that middle ground of fully flexible and fully rigid blended learning?" Cooney said. "Some of those structures of the traditional system are positive. Models where [teachers] remove too many of those structures make it hard for students."

Although all of Bella Romero's teachers launched blended learning with nearly the same Station Rotation as their daily go-to model, many are using different practices and ideas and collaborating with each other to find the mix of models that work best in their classrooms for their students in a given circumstance. "Almost no one runs the same model every day now," Cooney said. Though there are exceptions, Cooney's call to "iterate" is certainly being heeded en masse. As he noted, "When you ask teachers today what model they implement, they'll respond, 'When?' Teachers have realized that the model used should be based on what they are trying to achieve."

Jones agrees that this poses a balancing act between rigidity and flexibility. She believes that there's a critical learning curve when launching blended learning, and starting off with a more rigid model may be the most effective route for teachers. "Some of our new teachers this year want to try a Flex model ... but they need a gradual release to get to that point. There has to be a progression in their own professional growth," she said.

District of Columbia Public Schools (DCPS) is the country's fastest-improving urban school district.[11] As one part of its larger solution to bettering the district's outcomes, DCPS first dabbled in blended learning in a few schools during the 2012–13 school year. The following year, the district partnered with Education Elements to help scale this effort across five schools: three elementary schools, one K–8 school, and one middle school. Blended-learning models have since spread to all schools in the district in certain content areas and grade levels, with 17 whole-school models: 10 elementary schools, four middle schools, and three high schools. All of the elementary schools launched blended-learning programs that were anchored in the Station Rotation model.

As each school's blended-learning model evolved, DCPS continued to support the unique needs of school leaders and teachers. For example, DCPS partnered with Education Elements to work with schools individually on routines and procedures, student reflection, and data-driven decisions, depending on their areas of need. The district's elementary literacy team also worked with Education Elements to develop a collaborative learning framework to support the collaborative learning station in blended models.

John Rice, the district's educational technology director, oversees blended-learning implementation and supports schools in the selection and rollout of online content. He said that for the initial rollout of blended learning, the district chose the Station Rotation model after seeing it successfully implemented at KIPP Empower, a public charter elementary school located in Los Angeles. "Five years ago, blended learning wasn't as prevalent as it is today. KIPP Empower was one of the earliest examples that saw immense growth with a Station Rotation in schools like those at DCPS, so we decided to follow their lead," Rice explained.

Throughout DCPS, schools were asked to use a Station Rotation model that supported at least 20 minutes of online learning each day. Schools could select from a list of five products, including ST Math, i-Ready, and Lexia Learning.

At the same time that these blended-learning pilots were getting off the ground, DCPS also began collaborating with CityBridge Foundation, a nonprofit enterprise that helps redesign public schools in Washington, D.C., and NewSchools Venture Fund, a nonprofit that supports education entrepreneurs, to create the Education Innovation Fellowship[12] for a select group of innovative, exceptional teachers within the district looking for opportunities to hone their craft. The Fellowship is a yearlong program that introduces teacher leaders to the most promising practices in personalized learning. During the Fellowship, Fellows design and lead personalized learning pilot programs in their classrooms and schools. They also visit innovative schools around the country, such as Summit Public Schools, a charter school network located in the San Francisco Bay Area.

The Fellowship left a profound impact on three DCPS elementary school teachers: Milton Bryant, Diane Johnson, and Kaila Ramsey. After visiting innovative schools and being granted the license and encouragement to experiment with new instructional approaches, these three teachers set out to modify and expand upon their blended-learning models. For each, this has meant innovating on top of the district's original Station Rotation model in an effort to better serve individual students' needs.

AT A GLANCE

44,942 Total Student Enrollment

129 Schools

99% Free and Reduced Lunch

10% English-Language Learners

STUDENT ETHNICITY
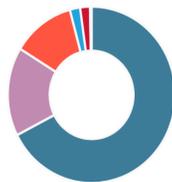
- **67.6%** Black
- **16.3%** Hispanic
- **12.1%** White
- **2%** Asian
- **1.9%** Two or More Races
- **0.2%** Hawaiian Native/Pacific Islander
- **0.1%** American Indian/Alaska Native

Diane Johnson, 5th grade

Orr Elementary School

AT A GLANCE

384
Total Students

100%
FRL

0%
ELL

STUDENT ETHNICITY

66.2% Hispanic
21.9% Black
9.5% White
2% Asian
0.5% Two or More Races
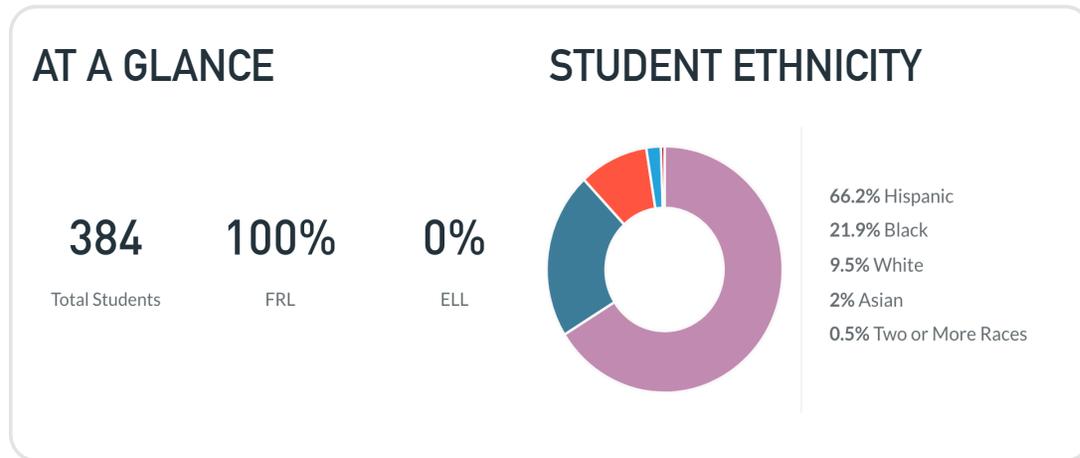
Located in Southeast Washington, D.C., Orr Elementary School participated in the district's first blended cohort. Prior to joining the Education Innovation Fellowship, Diane Johnson had settled into a Station Rotation routine in her 5th-grade math and science classroom. She started off her class with a whole-group lesson, then moved students through three different 15-minute stations—one station was i-Ready, another was math games, and a third was independent work based on the lesson. Meanwhile, Johnson pulled out small groups of students as needed to hash out the lesson for students who needed a "reteach" or extra help. Every student went to every station every day—and that was the hitch, Johnson said: "Everyone was doing the same thing."

As a 2015 Education Innovation Fellow, Johnson's thinking as a teacher shifted when she visited other blended schools. She noticed that those schools integrated an increased measure of differentiation into their models, and she questioned the efficacy of the whole-class instructional model she had always used.

"In whole-group, I felt like I was teaching to the middle and realizing that students who were clearly [ready] for next-level stuff were bored, and the students who weren't accessing the concepts and understanding, I was always pulling them into my re-teach station." She took this idea back

SY2013–14:

Whole-group lecture followed by three stations: online, independent work, games

SY2014–15:

Jan: Fellowship begins

Spring: Three stations, no whole-group instruction

SY2015–16:

Collaborative station for peer-to-peer projects

Teacher-created videos on Blendspace

Open-space stations with new furniture

Students choose digital content, set goals

Spring: "Labeled" stations return, goal setting removed

Summer (pilot model):

Flexible seating and furniture

Weekly goal setting, students view data each week

SY2016–17:

Rotation with four stations

Weekly goal setting, flexible seating

to her classroom and adapted her model to include a teacher station with small groups that were organized by level.

From there, school visits to other blended-learning schools continued to inspire her. On a visit to City Neighbors Charter School in Baltimore, Johnson was inspired by the fact that the teacher didn't need to manage and direct the pupils constantly.

"The students were so independent. They knew what they were doing and why they were doing it," Johnson observed. "I wanted my students to have this mentality, to be able to speak to what they were doing, why they were doing it, and be independent learners."

> "I wanted my students to... be able to speak to what they were doing, why they were doing it, and be independent learners."

At other schools, Johnson saw that flexibility with seating and space leant students a new level of trust and a chance to take ownership of their learning process. "Before [the fellowship], I always had the kids face away from me so I could see everyone's screen," Johnson recalled. "But I decided to have the mindset of 'Give me a reason not to trust you.'"

Back in her classroom, Johnson made a dramatic shift: she transitioned her classroom from a Station Rotation to a Flex model. In that model, Johnson began to peel away the visible markers of structure. She let her students choose where they sat—on the floor, on pillows, on a couch, or at tables. It was an adjustment for her as a teacher to let go of organized space.

"I thought it would be chaotic and I would lose control of the space," Johnson said. Because she could still monitor student progress online, however, she grew to feel more comfortable with students learning where they pleased. And to guide her students along their learning path, Johnson added weekly check-ins so that she could share data with students and help them to set their own learning goals for the next week.

After some time, though, Johnson realized that her students might benefit from some of the structures that she had eagerly cut out. "I was giving students a lot of freedom—to choose which program to go on, to let them set their own goals," she said. "But some [of their goals] were so unrealistic... and I didn't give a lot of guidance. I wanted the class to look like what I had seen [in other schools], but I was asking a lot of the students."

Johnson decided to rein the model back in. She spent the summer break tweaking and testing a revised approach. In her latest iteration, Johnson has reinstated labeled stations around the class so that students physically rotate and know exactly where to work. Within each station area, though, students still have multiple seating options. Johnson also uses a timer again to move students through three stations: peer collaboration, independent online practice, and small-group instruction with the teacher.

Today, Johnson believes that her students are benefiting from a return to the guidance provided by the Station Rotation, while at the same time retaining some ownership of learning goals, space, and activities. This key shift means that even though all of Johnson's students are still rotating through each station, they are doing so with personalized goals on their mind. Keeping an eye on individual students' needs, Johnson intends to continue evolving the model over time.

"I want to push toward a classroom where we don't necessarily have a timer," she said. "My vision is that the stations are there, but they are moving when they know they are ready to move, not when I say they are ready to move."

Then
2013-2014

Monday - Friday

Whole Group Instruction → Online Instruction → Independent Practice → Math Games + Reteach Station

Now
2016-2017
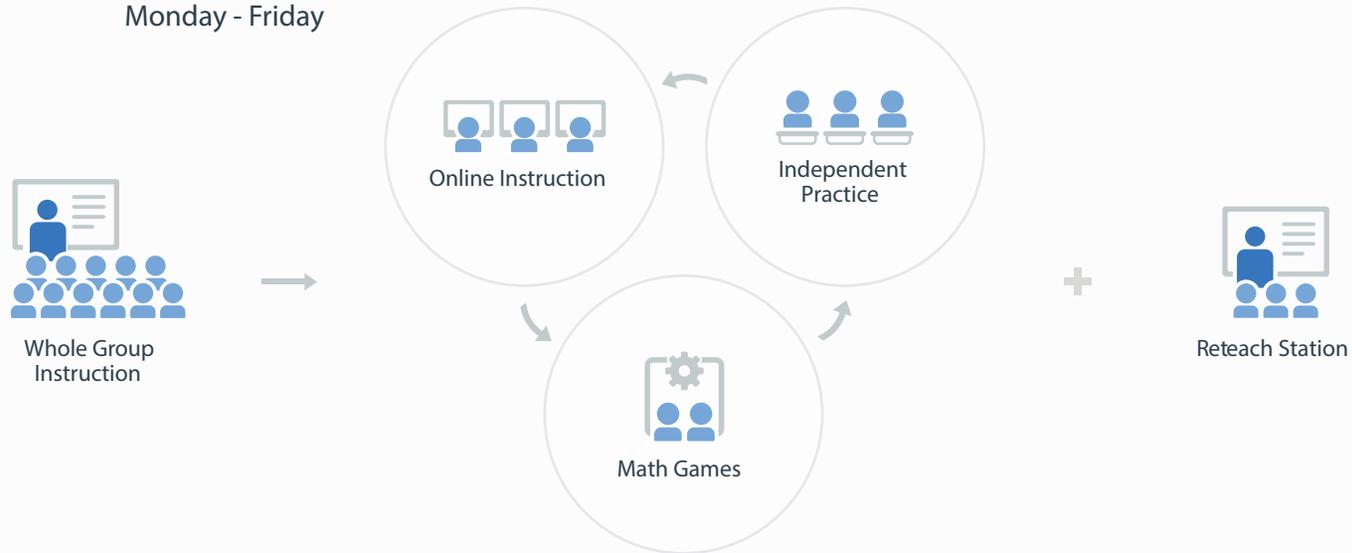
Key Change: Teacher station has been removed to allow for flexible time. Time in station is flexible.

Monday - Tuesday

Collaboration
Independent
Online
Small Group

Wednesday

Online Station
Collaboration
Student Goal Setting

Thursday - Friday

Collaboration
Independent
Online
Small Group
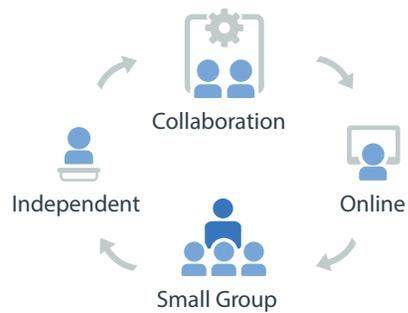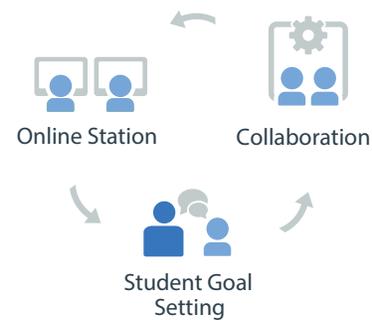
Milton Bryant, 4th/5th grade

Ketcham Elementary School

AT A GLANCE

309
Total Students

100%
FRL

1%
ELL

STUDENT ETHNICITY

97.4% Black
1.3% Hispanic
1% Two or More Races
0.3% Asian
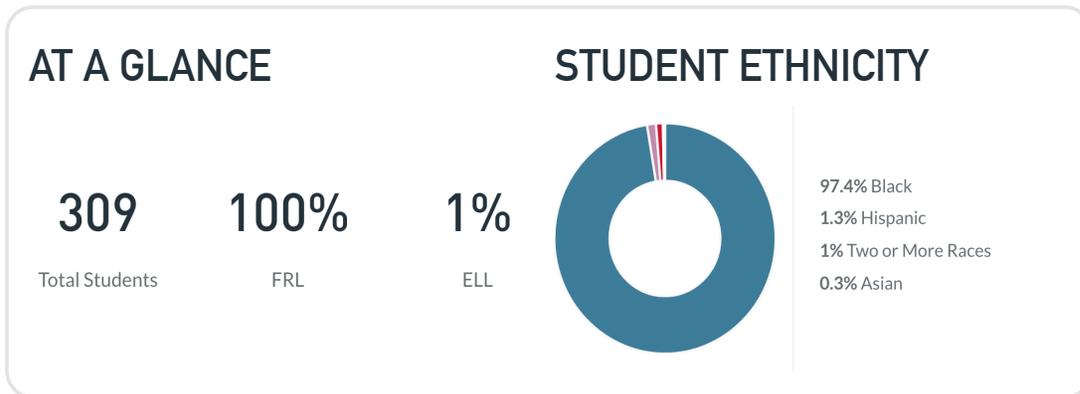
Just a few blocks away from Diane Johnson's Orr Elementary School, another 5th-grade math teacher, Milton Bryant, has been developing and tweaking a blended model of his own. Before Ketcham Elementary School, the school where he teaches, was selected to be part of DCPS's blended-learning pilot with Education Elements, Bryant had only used classroom rotations during guided reading.

"I did strictly whole group everything," he said. Nonetheless, he was one of the tech-savvy teachers in his school and keen to incorporate online-learning platforms into his instructional practices.

Bryant's first Station Rotation model was part of Ketcham's whole-school onramp to blended learning and developed in collaboration between John Rice's office and Education Elements. That first year, Bryant and his colleagues all implemented the same blended math model to get their bearings with blended learning. The model had consisted of three 20-minute stations: online learning with ST Math, small-group instruction with the teacher, and independent work supported by a City Year mentor. Then, halfway through his first year using blended learning, Bryant was named a 2014 Education Innovation Fellow.

Also like Johnson, seeing other schools' approaches to blended learning expanded Bryant's aspirations for his own classroom. "It quickly changed my ideas about what blended learning is, and how it could be utilized and best used within my school setting," Bryant said.

SY2013–14:

Station Rotation: independent work, teacher station, online station

Jan: Fellowship begins

March: a Flex model with digital playlists for groups

SY2014–15:

First day of school: competency-based experiment in which students progress at own pace

Late fall: Return to a Station Rotation, students choose a Flex day

Feb: Flex days removed, students select independent projects

Spring: Return to Flex days

SY2015–16:

Station time is flexible. Students rotate through 4-5 stations based on individual goals.

SY2016–17:

Station Rotation three days a week: online station, small-group time station, projects station

Students select online content

Flex days two days a week

Within weeks of his visit to Summit Public Schools, Bryant began pivoting away from a Station Rotation and toward a Flex environment. He started off building playlists for his students and created a giant chart for his classroom on which students could track with stickers their mastery of grade-level standards. Additionally, Bryant started recording instructional videos so that students would have access to a familiar voice while learning online. Instead of moving on a timer between rotations, students advanced along different learning modalities with more control over their pace. Moving through the playlist, students completed worksheets, worked with a mentor, collaborated on projects, learned online, and finally presented their work to Bryant to demonstrate mastery of the given learning standard. Bryant asked students higher level questioning to see if they could apply the skills they learned from their online learning. At his teacher-led station, students engaged in greater in-depth conversations about the skills learned. If they struggled to show mastery, Bryant helped them figure out where to go back and practice. In cases where a student needed additional instruction, he spent time with that student reviewing basic skills and guiding them through applications of what they learned to different situations.

As a teacher, Bryant enjoyed leading this flexible learning environment but saw that not every student thrived with so much choice—particularly when paired with the task to self-motivate.

"It was a lot of freedom given all at once, and [the students] were not accustomed to it," Bryant explained. "I saw a program rolled out somewhere else and tried to implement it too fast for my students. To have them be in charge of their learning all at once wasn't the best way. I was expecting all of the kids to learn many of the lower-level skills on their own on the computer and some weren't mature enough to handle it."

According to Bryant, the Flex model only worked for a subset of his class, especially those students who were the most conscientious and organized. To address the model's shortcomings, Bryant decided instead to work toward a model that would support his whole class.

"I realized that the model supports most of the students, but not all, so I pulled back from Flex and started to mix the two [models]."

In Bryant's case, his model "mix" meant alternating days doing the Station Rotation and Flex approaches. Still, he faced the challenge of guaranteeing that all of his students made progress. On the Flex days, he noticed that some students fell behind because of the lack of structure—they needed more opportunities for feedback from their teacher and collaboration with their peers.

So once again, Bryant iterated on the model. Today, he has cut the Flex model down to one to two days per week and is focused on improving on flexibilities within the Station Rotation model. For example, at the independent station supported by a mentor facilitator, students now choose what they work on from a bucket of project options. Also, if a student rotates into the teacher-led, small-group station but doesn't require additional instruction, then Bryant directs the student to another station instead. On the Flex days, all of the rotations are individualized so that students control their time, path, pace, and place. Not every student rotates at the same time, but instead, when a student finishes her task at a certain station, she visits Bryant for feedback before moving on to another station of her choice. Bryant roams the classroom to check in with students at each transition point to ensure that students stay engaged and make progress.

Bryant finds that the Station Rotation days help support students who need more teacher guidance, yet the Flex days are important to maintain engagement.

"[Flex] really pushed some of the advanced students. Their engagement level was better," he said. "And I enjoy it more as a teacher. Students enjoy projects and this way can showcase mastery in a variety of ways. As adults we like to have options to do things, so why limit kids to one singular way of showcasing mastery?"

Bryant keeps trying to strike the right balance of providing his students both structure and choice. Teaching at an inner-city school, Bryant strives to create a model that will challenge his students yet still provide a comfortable, safe environment that allows him to develop strong relationships with them.

"I will be honest, I have a difficult class," Bryant said. "With the stations, I get to have time with all the students each day. They have structured turn-and-talks, discussion times, and we can go back and forth, peer to peer. If the environment is too flexible, it is hard to manage their behavior—and not only that, but their work ethic—to help my students. I need to do a better job of cultivating their underdeveloped soft skills, which would support their

ability to work independently and in groups to learn different skills. So in the stations I get to motivate them, work with them, show them how to do things, why you do them, and build up this positive vibe."

He sits down one day every month with each student to review data together and discuss progress. He finds these meetings help students make the right choices when they are later responsible for deciding which online tools to use and when.

Although the hybrid Rotation/Flex model he's landed on is working well, Bryant's innovative mindset keeps him constantly iterating. For instance, for one month in the 2014–15 school year, Bryant took a stab at implementing a model in which all instruction was online, which allowed individual students to self-pace and move through customized playlists independently. Each student determined which unit to work on depending on her level of understanding of the content, and the class worked on essentially 20 different lessons at once, ranging from 1st-grade to 7th-grade skill levels.

For the majority of his class, however, that experiment lacked an important collaborative piece. Though Bryant ultimately moved away from a completely individualized, online-learning environment, he determined that playlists for small groups instead of individuals work well. Today, Bryant creates small-group playlists that are based on level and adjusted week by week. While a new approach may fail to meet all his students' needs, Bryant doesn't view the attempt as a failure.

"We can try something different and make changes and improve," Bryant said. "I am okay with making mistakes, and tell the kids it's okay for them, too."

"In the stations, I get to motivate [students], work with them, show them how to do things, why you do them, and build up this positive vibe."

Then
2013-2014

Monday - Friday

Online Instruction

Small Group Instruction

Independent Work

👤 Teacher 👤 Paraprofessional

Now
2016-2017

Key Change: Time in station is flexible. Students choose digital content themselves.

Monday	Tuesday	Wednesday	Thursday	Friday
Online Station — Small Group — Collaboration	Flex + Small Group Instruction	Online Station — Small Group — Collaboration	Online Station — Small Group — Collaboration	Flex + Small Group Instruction
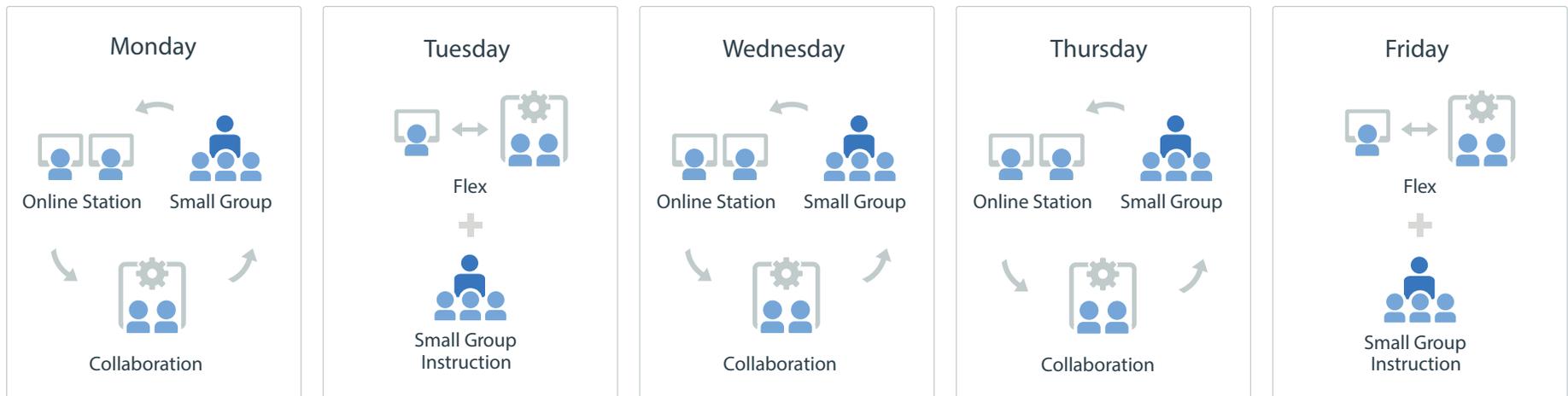
Kaila Ramsey, 4th grade

H.D. Cooke Elementary School

AT A GLANCE

400
Total Students

100%
FRL

46%
ELL

STUDENT ETHNICITY

65% Hispanic
29.3% Black
3% Asian
2.3% White
0.5% Two or More Races
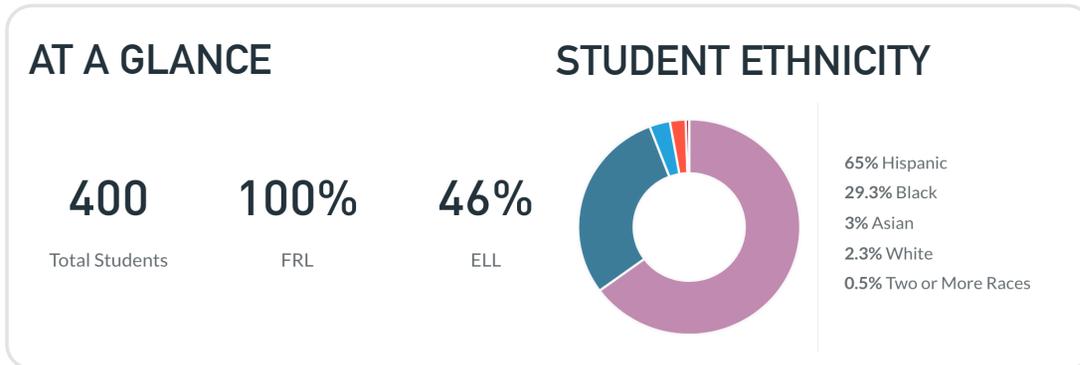
On the other side of the city, Kaila Ramsey, a 2016 Education Innovation Fellow and 4th-grade math teacher, had used the Lab Rotation and Station Rotation models for several years. Her model had consisted of a simple rotation between whole-group instruction and online time, where all of the students would pull out their laptops or move into a lab to use ST Math two days a week. Stations or learning centers were used on other days, where students would rotate between learning activities and teacher time throughout the class period. She had always preserved whole-group time each day in order to maintain inquiry-based learning and help students work together collaboratively to solve a single problem.

Gradually, however, Ramsey recognized limitations to her model that prompted her to rethink the consistent routine she had set. For one, three stations a day were challenging to manage and the students lost learning time during station transitions. Second, as a teacher, Ramsey wanted a way to track which modalities were helping which students to learn successfully.

"With every student going to every station every day, how was I to know which activity prompted the learning?" Ramsey explained. "I had no clue which station on which day was driving learning."

Ramsey appreciated that data from online programs like ST Math might provide some clues, but she needed a temperature gauge at other stations to understand truly which stations and activities helped her students to learn. To accomplish this, Ramsey put her students on one station per day where they would spend 30 to 45 minutes either working with the teacher, working online, or working on independent work. Additionally, at the independent work stations, she began to offer

SY2013–14:
Station Rotation or Lab Rotation with ST Math twice weekly

SY2014–15:
One 30-minute station at end of class, no rotation

SY2015–16:
Jan: Fellowship begins

Jan—June (experimenting):

One station per day

Students select from multiple activities at each station; set goals

Peer-to-peer station

Summer 2016:
Student playlists on Canvas

SY2016–17:
Projects and whole-group problem solving three times per week, Stations twice per week

Weekly data check-ins, student goal setting and station planning
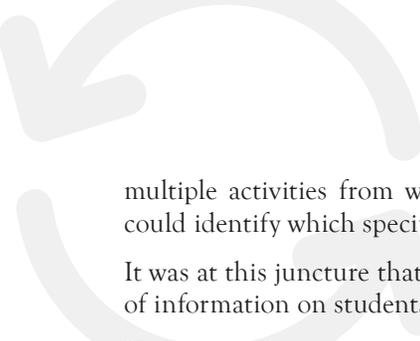
multiple activities from which students could choose. This way, Ramsey could identify which specific activities were helping her students progress.

It was at this juncture that she recognized a powerful yet underused source of information on students' learning: her students.

"I realized, they can easily tell you what they know and don't know. They know their strengths and weaknesses," Ramsey said.

Taking that into account, she developed a peer-to-peer station where a student struggling with a particular skill or standard could partner up with a student who had really mastered that standard. Ramsey posted a dashboard, which is included in **Appendix B**, in the classroom that let students both keep track of concepts they understand or need support with and quickly match up with a classmate whom they could could help or seek tutoring from.

"I had students every day write their name down next to certain concepts they were struggling [with] or succeeding in," Ramsey described. "That way they would know what they needed to be working on and who could help them."

In the peer-to-peer station, both students recorded and showed their own work on a worksheet, which is included in **Appendix C**, allowing Ramsey to view each student's progress during that station.

After watching her students self-identify weak spots in their learning, as well as observing students in other classrooms through the Fellowship, Ramsey understood that her students were capable of taking a greater degree of ownership over their learning process. She began to perceive student choice as a powerful lever for learning.

"The big a-ha for me was on student engagement," she said. "As part of the fellowship we went through the design thinking process, and what stood out for me was how powerfully students responded to choice and self-selecting their learning activities. They preferred to manage their own time and choose what to work on. I also learned that students want a balance with whole group and small group."

Ramsey has adapted her model accordingly, carving out more choice in each daily station. She created a mock personalized learning platform in the learning management system Canvas where students could view their teacher-tailored options of assignments and select the stations they worked on.

> "What stood out for me was how powerfully students responded to choice and self-selecting their learning activities. They preferred to manage their own time and choose what to work on."

"We now have weekly check-ins on Wednesdays where we are looking at their data, conferencing, and I can help guide their activities for the rest of the week," Ramsey added.

The platform has also started solve Ramsey's challenge of not knowing what modality was working—and it makes the path to progress transparent to both teacher and student. "[The students] see the results of their choices at the end of the week, see when their peers are doing better, and understand why," Ramsey said.

Today, Ramsey's class generally spends three days a week working through complex problems with an inquiry-based approach to learning. On these days, students are presented with a complex problem, and after working in small groups and as a whole, they apply concepts they have recently learned to piece together a solution. On non-inquiry days

students work at stations where they can self-select the activities they perform at each station, including both individual work activities and peer-to-peer instruction.

Through her classroom model, Ramsey aims to help students develop self-management skills while still learning content, particularly given that her students stand to benefit from extra noncognitive learning support. Though before the fellowship Ramsey wrestled over time with how much free choice to offer students, she now believes that giving students choice not only boosts their engagement, but also empowers them to be active, self-directed learners.

"Giving my students choice is about fundamentally restructuring the way a child interacts with school," Ramsey explained. "Students who have been pigeon-holed as 'low-achieving' students often have less ownership of their learning time than their higher-achieving peers in other parts of the city. I view choice as a lever to attack inequity and the types of experiences we provide for our students."

In this vein, over the course of the school year, Ramsey gradually moved her class toward an individual playlist that students set for themselves on a bi-weekly basis.

"We're moving closer to completely free choice," Ramsey said. "Choice has empowered students to own more parts of their learning experience. They are not just more engaged in the activities but are also invested in the outcomes." A sample of the student choice playlist that Ramsey developed is included in **Appendix D**.

Kaila Ramsey, Milton Bryant, and Diane Johnson are not lone innovators in DC Public Schools. John Rice, the district's education technology director, estimated that teachers in more than a dozen schools are making strides to implement significant changes to their rotational models in an effort to better support differentiation, leverage project-based learning, and infuse student agency. Many more teachers in the district are passionately working to first master the choreography of a more traditional Station Rotation.

Rice doesn't hesitate to call teachers like these three Education Innovation Fellows "rockstars"—teachers who are at once persistently exceeding expectations, innovating, and adapting instructional models to boost their students' learning and skill building. Bryant, Johnson, and Ramsey enjoyed the benefits of the Education Innovation Fellowship, which offered exposure to new ideas, opportunities to collaborate, and additional latitude from their principals to experiment with instruction beyond certain district expectations, like online content quotas. In addition, some of these teachers benefited from still other valuable opportunities. In addition, some of these teachers grew from other valuable opportunities. For example, Ramsey received a summer grant from the district to work at the district office to redesign her blended model and do a trial run with a summer school class. Bryant, too, serves as a teacher-leader—meaning he spends part of his time teaching and the rest coaching colleagues in his school and improving his own methods. These gifts from the district of time, exposure to new approaches, and resources to pilot innovative approaches have been crucial factors for these teachers to modify their model.

> These gifts from the district of time, exposure to new approaches, and resources to pilot innovative approaches have been crucial factors for these teachers to modify their model.

Kaila Ramsey: Blended Learning Model Changes Over Time

4th Grade Math Teacher • H.D. Cooke Elementary

Then

2013-2014

Monday	Tuesday	Wednesday	Thursday	Friday
Whole Group Problem Solving	Whole Group Problem Solving + Online Station	Whole Group Problem Solving	Whole Group Problem Solving + Online Station	Small Group / Learning Games / Independent Work

Now
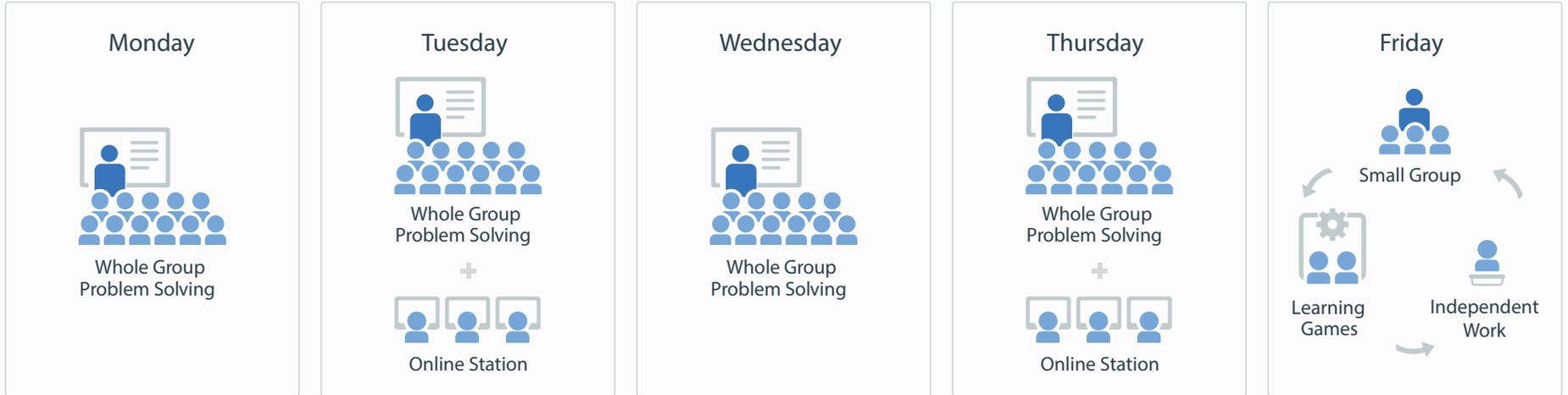
2016-2017

Key Change: Students select learning activities on station days.

Monday	Tuesday	Wednesday	Thursday	Friday
Whole Group Problem Solving + Collaboration	Whole Group Problem Solving + Collaboration	Online Station + Teacher 1:1 Goal Setting	Whole Group Problem Solving + Collaboration	Online Station / Independent Work / Collaborative Projects
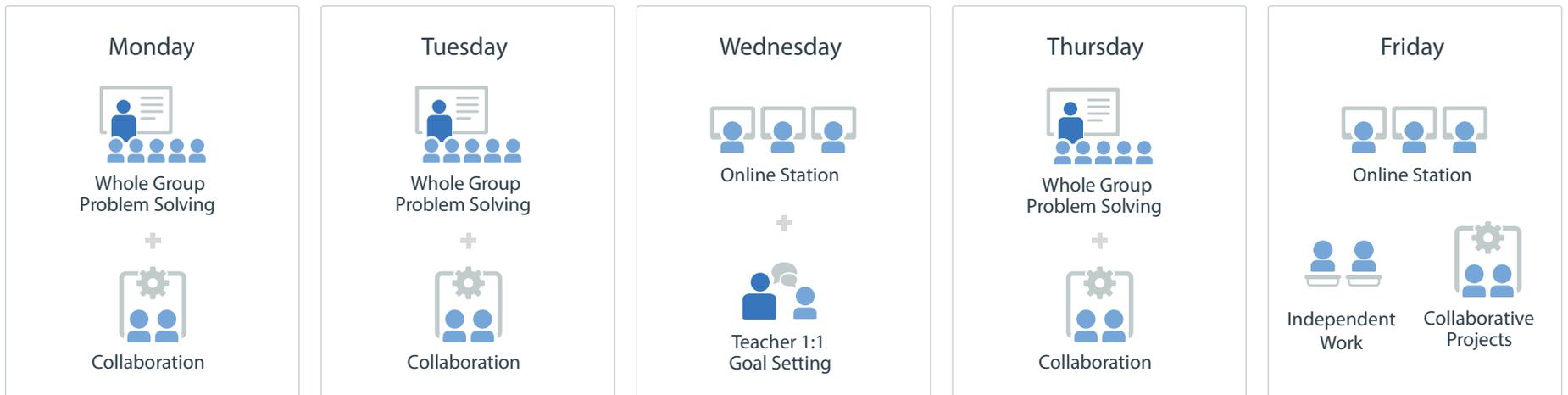
CONCLUSION: WHAT'S NEXT FOR BLENDED LEARNING?

The evolution of the Station Rotation model at Bella Romero and DCPS is unique to each institution's leadership, teachers, and student needs. Yet, every one of these seven educators have iterated on the model in an effort to fortify levers they deem powerful to drive student agency, flexible use of time, and differentiation. In some cases, teachers have incorporated these levers within their Station Rotation models. In other cases, teachers have chosen to add different, more flexible models into the student learning experience.

This is hardly surprising as the call to personalize instruction has grown ever louder in systems like Greeley and DCPS. Personalizing instruction to reach each and every student demands a degree of flexibility that grouping and rotating students in a fixed manner does not intrinsically afford. The tenets of the student experience that led these seven teachers to modify their models—tenets like agency, choice, projects, and flexible pacing—demand adaptation and innovative processes within and beyond traditional structures.

If anything, these stories drive home the fact that a model is a starting point, not the finish line. Blended learning should be an ongoing process of innovating to address problems or needs of students consistently as they arise. Bella Romero and DCPS demonstrate that adopting a model is often the first step toward eventually adapting it.

Appendix A. Mallory Mattivi's bi-weekly instructional model

Day	What I Do...	What My Students Do...
1	Facilitate and support collaborative groupings.	Work in different collaborative groupings to practice a specific skill from a previous module.
2	Deliver a whole group introduction (lecture) about the module's skill of focus.	Take notes on the lecture to use a resource later. Complete exit tickets to gauge initial understanding of the skill.
3	Conference one on one with students about progress and skill mastery.	Complete independent work from their checklist for the unit and 20 minutes of digital content. The independent work could be essays, learning guides responding to different leveled or grade level texts, and extensions of the skill.
4	Meet with small groups who need remediation a the previous module's skill and assign them a review task.	Independent work from their checklist for the unit and 20 minutes of digital content.
5	"Work the floor": Answering student questions and providing guidance.	Independent work from their checklist for the unit and 20 minutes of digital content.
6	Facilitate and support collaborative groupings.	Work in different collaborative groupings to practice a specific skill from a previous/current module.
7	Meet with small groups that need some slight remediation from the previous module's skill and assign them review work.	Independent work from their checklist for the unit and 20 minutes of digital content.
8	Conference one on one with students about progress and skill mastery.	Independent work from their checklist for the unit and 20 minutes of digital content.
9	Meet with small groups that need an extension for the previous module's skill.	Independent work from their checklist for the unit and 20 minutes of digital content.
10	"Work the Floor"	Independent work from their checklist for the unit and 20 minutes of digital content. Students also take a Schoology Mini Assessment to gauge understanding of the module's skill and to influence the following week's small groups.

Source: Mallory Mattivi, Bella Romero Academy

Appendix B. Kaila Ramsey's classroom organizer for the peer-to-peer station
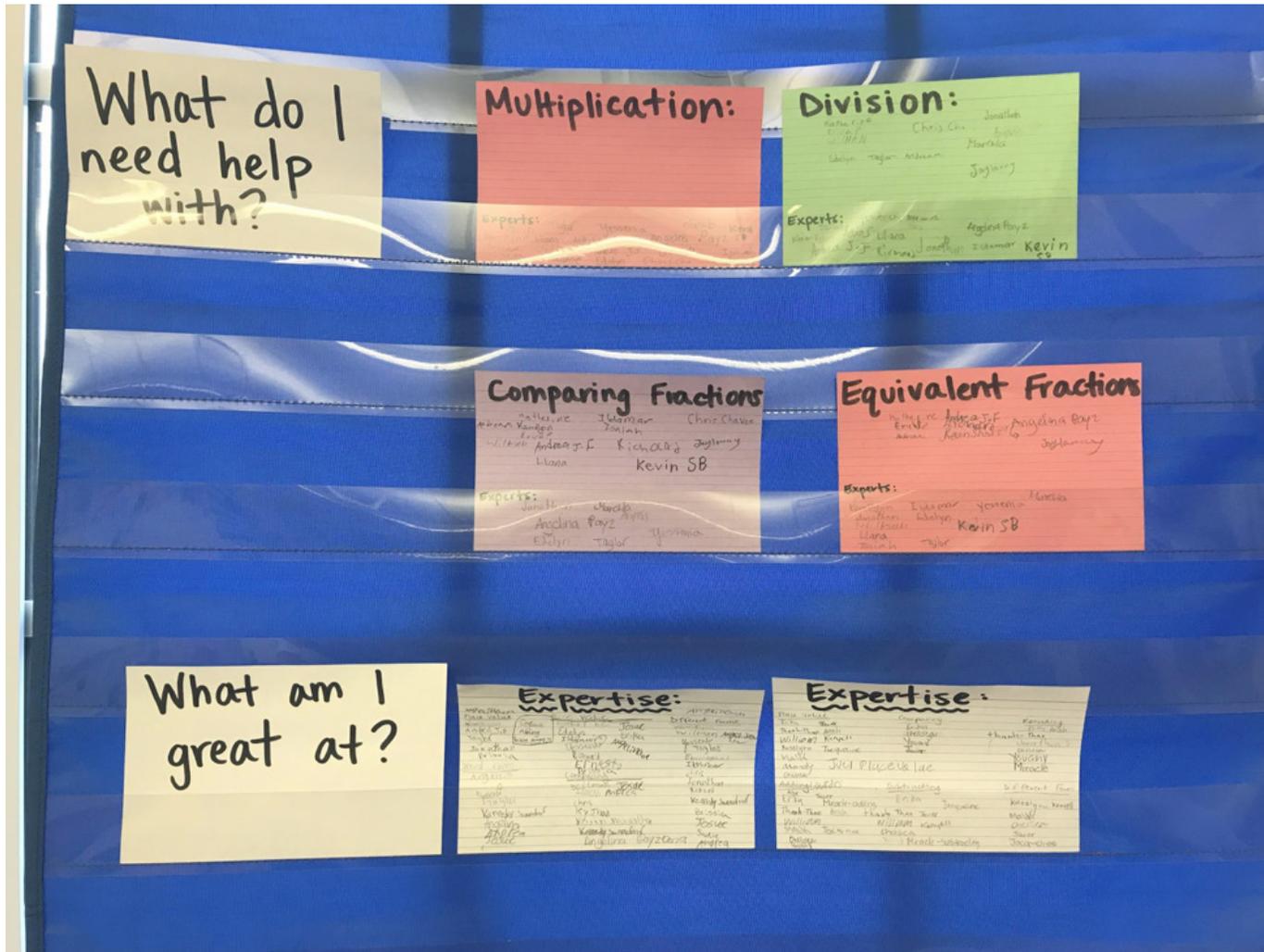
Source: Kaila Ramsey, H.D. Cooke Elementary School

Appendix C. Kaila Ramsey's student tracker for the peer-to-peer station

Peer Tutoring Tracker

*One sheet per student in the tutoring group

Date:_____

Who is the tutor?	
Who are they tutoring?	
What skill(s) are you focusing on?	
Scratch Work Space *Student being tutored can work out problems here	
Additional Work Space *Student being tutored can work out problems here	
Exit Ticket *Tutor creates a problem for the student to solve here	

Source: Kaila Ramsey, H.D. Cooke Elementary School

Appendix D. Kaila Ramsey's biweekly student-driven playlist

_____'s Station Plan, Week of _____

Make sure to look over your station checklist when making your plan!

Monday	Tuesday	Wednesday	Thursday	Friday
What skill will you practice? How will you practice it? With whom?	What: How/Who:	What: How/Who:	What: How/Who:	What: How/Who:
Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
What: How/Who:	What: How/Who:	What: How/Who:	What: How/Who:	What: How/Who:

Source: Kaila Ramsey, H.D. Cooke Elementary School

NOTES

1. Throughout the publication, we refer to "stations" in the same way that educators have historically referred to "learning centers."

2. Jimmy E. Nations, "Learning Centers in the Classroom," National Education Association, 1976, http://files.eric.ed.gov/fulltext/ED120123.pdf.

3. Blended learning is a "formal education program in which a student learns part online, with some element of control over the time, place, path or pace of their learning, and part in a brick-and-mortar location away from home. The modalities along a student's learning path are connected to provide an integrated learning experience." See Michael B. Horn and Heather Staker, *Blended: Using Disruptive Innovation to Improve Schools* (New York: Jossey-Bass, 2014), p. 31.

4. Heather Staker, "The rise of K–12 blended learning: Profiles of emerging models," Innosight Institute, May 2011, https://www.christenseninstitute.org/wp-content/uploads/2013/04/The-rise-of-K-12-blended-learning.emerging-models.pdf.

5. "Station Rotation search results," Blended Learning Universe, http://www.blendedlearning.org/directory/schools?name=&state=&blended_models%5B%5D=5&exact=1&page=1&per_page=20&offset=0 (accessed February 19, 2017).

6. "The Positive Power of Personalized Learning: Education Elements Impact Report 2015-2016," Education Elements, https://www.edelements.com/hubfs/Impact-report-2015-16/EducationElements_Personalized_Learning_ImpactReport_2015-2016.pdf.

7. "Proof Points: Blended learning success in school districts," Evergreen Education Group and Clayton Christensen Institute, September 2015, https://www.christenseninstitute.org/publications/proof-points/ (acessed May 12, 2017).

8. Michael Horn, "New Data Backs Blended Learning," *The Atlantic*, September 23, 2015, https://www.theatlantic.com/politics/archive/2015/09/new-data-backs-blended-learning/432894/ (accessed January 27, 2017).

9. See Clayton M. Christensen, Michael B. Horn, and Curtis W. Johnson, *Disrupting Class: How Disruptive Innovation Will Change the Way the World Learns* (New York: McGraw Hill, 2008).

10. The Flex model of blended learning lets students move on fluid schedules among learning activities according to their needs. Online learning is the backbone of student learning in a Flex model. Teachers provide support and instruction on a flexible, as-needed basis while students work through course curriculum and content. This model can give students a high degree of control over their learning. See Horn and Staker, p. 71.

11. "DC Public Schools Continues Momentum as the Fastest Improving Urban School District in the Country", DC Public Schools, October 28, 2015, https://dcps.dc.gov/release/dc-public-schools-continues-momentum-fastest-improving-urban-school-district-country (accessed March 3, 2017).

12. CityBridge Foundation and NewSchools Venture Fund launched the Education Innovation Fellowship in 2013. With the support of a $1 million grant from the Microsoft Corporation, the Fellowship has served 54 Fellows in the first three cohorts. For more, see https://edinnovationdc.org/fellowship/.

About the Institute

The Clayton Christensen Institute for Disruptive Innovation is a nonprofit, nonpartisan think tank dedicated to improving the world through disruptive innovation. Founded on the theories of Harvard professor Clayton M. Christensen, the Institute offers a unique framework for understanding many of society's most pressing problems. Its mission is ambitious but clear: work to shape and elevate the conversation surrounding these issues through rigorous research and public outreach. Our K-12 education research aims to find innovative solutions for a more student-centered education system that helps each child achieve his fullest potential.

About the authors

Clifford Maxwell is a Product Manager at the Clayton Christensen Institute where he oversees our popular Blended Learning Universe— or BLU—a comprehensive online hub filled with blended-learning resources and practical guides, as well as a dynamic directory of blended-learning programs worldwide. Clifford earned a BS in Electrical Engineering from Brigham Young University.

Jenny White is the Assistant to the Director of Education and BLU Content Manager at the Clayton Christensen Institute where she helps to manage various projects across the education team. In addition to her work scaling growth on the Blended Learning Universe, she is involved in international blended-learning research, specifically in South Africa. Jenny earned a BA in International Relations and French from Tufts University.

CHRISTENSEN INSTITUTE

christenseninstitute.org