Blended Learning Initiative

Cohort 2, Year 1 (2018-19) Report

Key Findings

- Most schools struggled to meet the recommended implementation targets provided by the vendors for rotation programs. This was a consistent challenge across all three years of implementation.

- Teachers reported that they accessed program data on students and used it to inform instruction. Teachers' self-reported data access and use was higher in 2018-19 compared to the first year of implementation for the previous cohort.

- Coaches conducted almost 800 sessions with teachers; based on coaches' ratings, teachers improved their implementation over the course of the year.

- Teachers' survey responses about coaches were overwhelmingly positive.

- Principals' self-assessment scores of blended learning implementation readiness increased from the beginning to end of the school year.

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August 2020

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About the Blended Learning Initiative (BLI)

In 2016-17, the School District of Philadelphia (SDP) selected 39 schools (from all grade levels) to be part of Cohort 1 of the Blended Learning Initiative (BLI). *Blended learning* is defined as students receiving instruction in part from a teacher and in part from an online content delivery system where students have some control over the time, path, or place of instruction. Online adaptive programs (OAP) are a supplemental instructional resource to support classroom instruction. By adding an OAP to their classroom, a blended learning model provides a differentiated instructional experience for students and provides principals and teachers actionable data to understand students' skills and abilities. Each BLI school chose a blended learning model (a la carte or station rotation) and a blended learning online adaptive program from a list of approved vendors. In a station rotation model, students participate in online learning at one of several stations (the others being teacher-led instruction and small-group or independent activities). In an a la carte model, students take one or more classes online in addition to their in-person classes. These schools received Chromebooks and two years of support from the Office of Educational Technology (2016-17 and 2017-18).

In 2018-19, the District selected a new cohort of 32 schools to receive support (Cohort 2). Each school had to submit an application to the Office of Educational Technology that specified the number of classrooms that would implement blended learning. Selection criteria for schools included demonstrating an understanding of the model, an application that was supported by data, the inclusion of blended learning in their school plan, having a plan to provide training to teachers, selecting a school-level point person, and having methods for monitoring student usage and performance to maximize implementation effectiveness. Twenty-five schools were completely new, and seven were Cohort 1 schools approved to expand into additional blended learning classrooms (this report refers to schools in the former category as "new" and those in the latter category as "expansion" schools). "Cohort 2," then, includes participating teachers at the 25 "new" schools as well as newly participating teachers in expansion schools; in some cases, Cohort 1 and Cohort 2 teachers taught at the same schools. The supports that participating Cohort 2 schools received included Chromebook carts to use with the OAP as well as teacher and principal coaching. Across the 32 schools, there was variation in the number of classrooms that participated in the BLI. This determined the number of Chromebook carts each school received.

The majority of classrooms across the 32 Cohort 2 BLI schools used a station rotation model using one or more of the nine approved vendors and 14 OAPs (some vendors have more than one OAP; see Table 1). While there were 14 approved OAPs, BLI classrooms only chose to use 11 of the 14. At some schools, all BLI classrooms used the same OAP and/or vendor, while other schools used more than one OAP and/or vendor. This report looks at implementation during 2018-19, the first year of implementation for Cohort 2.

Table 1. List of approved vendors and online adaptive programs

Vendor	Online Adaptive Program (OAP)	Used by BLI Classrooms in 2018-19
Achieve3000	Achieve3000	Yes
Edgenuity	MyPath	Yes
Edgenuity	Pathblazer (Compass)	Yes
iReady	iReady ELA	Yes
iReady	iReady Math	Yes
Imagine Learning	Imagine Language & Literacy	Yes
Imagine Learning	Imagine Math	Yes
Jigsaw Learning	Teachtown	No
Learning A-Z	Headsprout	No
Learning A-Z	Raz Kids	Yes
Lexia	Lexia Core5	Yes
Lexia	Lexia Power Up	Yes
ThinkCERCA	ThinkCERCA	Yes
Waterford Research Institute	Waterford	No

What we examined

This report responds to six primary research questions as they relate to the first year of the second cohort of the Blended Learning Initiative (BLI):

1. How did teachers and principals perceive BLI implementation in 2018-19?
2. How did teacher perceptions in Cohort 2 differ from Cohort 1?
3. How often did students use the online adaptive programs, and how did this frequency compare to previous years?
4. What were the characteristics of schools where students met the OAP usage targets?
5. How frequently did staff from the Office of Educational Technology provide BLI coaching sessions, and what was the pedagogical focus?
6. How did coaches rate teacher implementation of the BLI model?

Data collection and analysis

We used four data sources to answer the research questions: survey data, student OAP usage data, coaching logs, and principal self-assessments. These data sources and their corresponding research questions are described in Box 1.

Box 1. Data sources used for each research question in this report

Teacher Surveys

Surveys were sent via email to all teachers participating in the Blended Learning Initiative (n=235) in January 2019 (middle-of-year) and May 2019 (end-of-year). The response rate for teachers was 37% at the middle of the year (n=86) and 52% at the end of the year (n=123). Descriptive statistics are presented for survey results, and open-ended items were analyzed for common themes. Survey data from Teacher Surveys that were administered to BLI teachers in Cohort 1 were also used as a point of comparison to see if there were differences in their experiences compared to the experiences of teachers in Cohort 2. Survey data were used to answer Research Questions 1 and 2.

Principal Self-Assessments

Principals at BLI schools completed the Blended Learning Self-Assessment Tool for Schools created by the Philadelphia Education Research Consortium (PERC). Principals rated their school as either Entering, Emerging, Adapting, or Transforming on ten components in four domains. BLI principals were encouraged to complete the self-assessment twice, once at the beginning of the year and again at the end of the year. These data were used in Research Question 1.

Student OAP Usage Data

Vendors provided annual student OAP usage and growth reports to the Office of Research and Evaluation (ORE). Students were only included in analyses if they were enrolled in the BLI school as of April 1, 2019 and were enrolled at that school for at least 90 days. These data were used to answer Research Questions 3 and 4.

Coaching Logs

Staff from the Office of Educational Technology coached teachers in their classrooms on implementing blended learning. After each visit, they logged the school, teacher, primary coaching focus, and, if they observed the teacher, rated them on the foundational aspects of blended learning implementation. These data were used in Research Questions 5 and 6.

What the evaluation found

This section reports on implementation of the Blended Learning Initiative (BLI) in 2018-19, survey results compared to previous years, and the characteristics of schools who met student OAP usage targets.

How did teachers and principals perceive BLI implementation?

This section presents teacher responses to survey questions at the middle of the 2018-19 school year and, if applicable, compares those results to end-of-year data in 2018-19. We compare middle-of-year (MOY) 2018-19 survey results to end-of-year (EOY) 2018-19 survey results to see if there are changes in teachers' experiences over the course of the year. In 2018-19, teachers received both a middle- and end-of-year survey. However, results were very similar between the two time periods, so end-of-year data is only included where it differs from middle-of-year results. For full results for both MOY and EOY in 2018-19, see Appendix A.

Almost all teachers reported that they used student data to differentiate instruction.

Most BLI teachers who responded to the teacher surveys at middle-of-year and end-of-year indicated that they accessed student progress data daily or weekly through the blended learning vendor websites (84% at MOY, 72% at EOY; Figures 1a-1b). Similarly, almost all teachers who responded to the survey said they used student progress data from their online adaptive program (OAP) to differentiate instruction (89% at MOY, 96% at EOY), and over half (71% at MOY, 53% at EOY) said they used data for this purpose at least weekly. Teachers also reported using data from their OAP to create student groups at least monthly (75% of survey respondents at MOY and 63% at EOY). The percentage of teachers reporting doing these tasks daily, weekly, or monthly decreased from MOY to EOY 2018-19.

Figure 1a. Teachers participating in the Blended Learning Initiative identified how often they accessed and used student data at the middle-of-year in 2018-19 (Cohort 2)
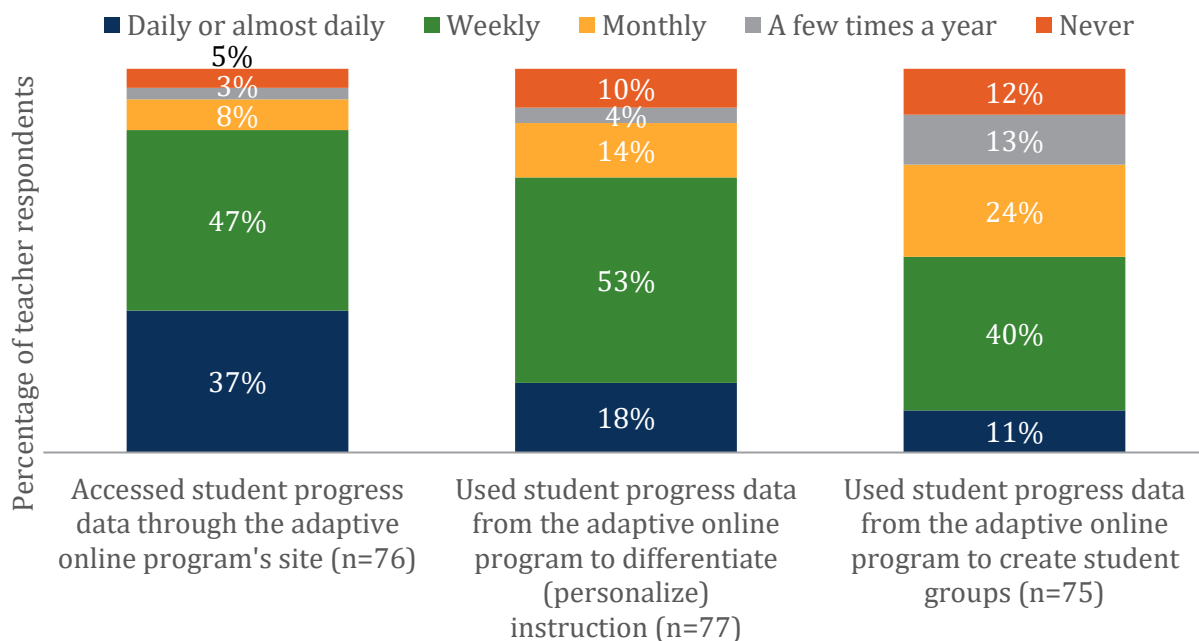
Source: MOY teacher surveys administered by ORE (January 2019).

Figure 1b. Teachers participating in the Blended Learning Initiative identified how often they accessed and used student data at the end-of-year in 2018-19 (Cohort 2)
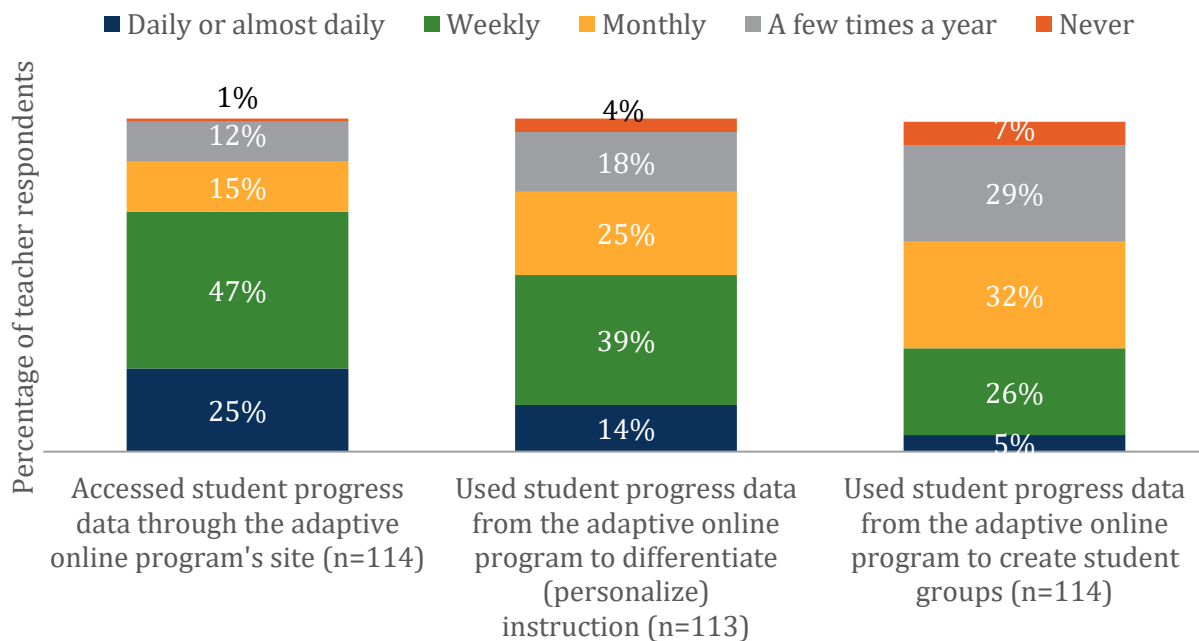
Source: EOY teacher surveys administered by ORE (May 2019).

Teachers said the BLI provided benefits for differentiating instruction but that some students struggled to work independently.

Teachers said that the Blended Learning Initiative provided more opportunities to differentiate instruction (86% of teachers at MOY said there was a great or moderate benefit; see Figure 2). Other benefits included increased student classroom engagement, improved classroom management, and increased student academic interest in math, reading, and other subjects.

Figure 2. Teacher impression of classroom benefits from the Blended Learning Initiative at middle-of-year 2018-19 (Cohort 2)
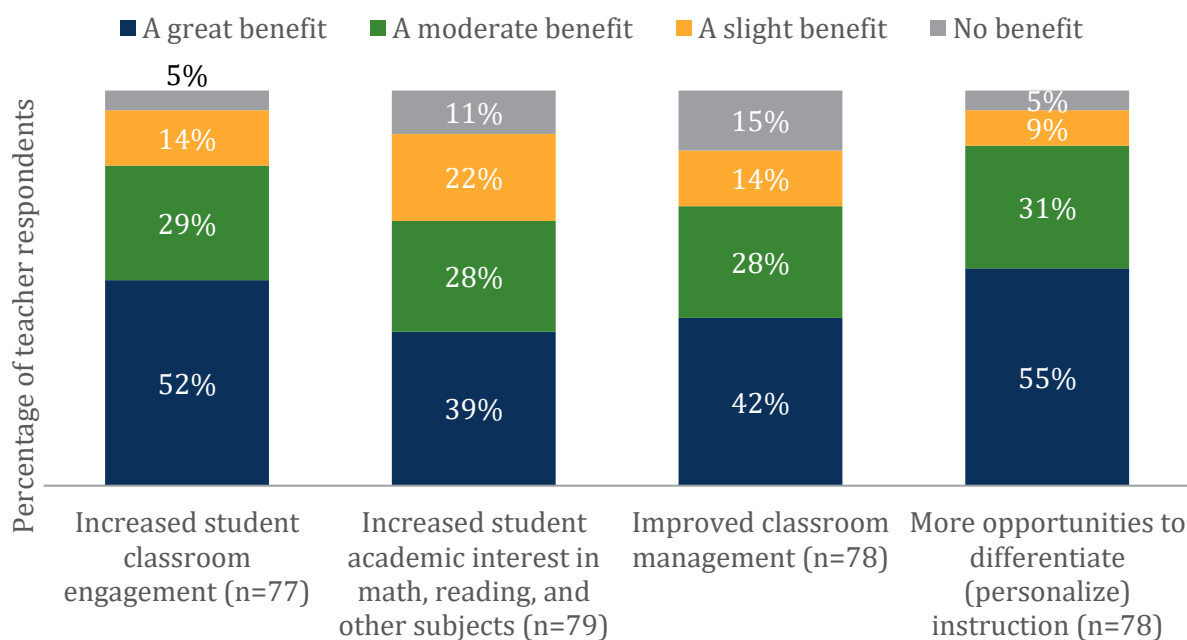
Source: MOY teacher surveys administered by ORE (January 2019).

According to teachers, some students struggled to work independently at a computer while using the OAP (60% of teachers at MOY 2018-19 said this was at least a slight challenge; see Figure 3a). About half of teachers also identified implementation challenges associated with students logging in, teachers receiving insufficient training, and technical problems with the OAP site not working as challenges. The percentage of teachers saying a lack of support from school leadership was not a challenge increased to 87% at EOY 2018-19 from 75% at MOY (Figures 3a-b).

Figure 3a. Extent of challenges teachers experienced implementing the BLI at middle-of-year 2018-19 (Cohort 2)

■ Not a challenge ■ A slight challenge ■ A moderate challenge ■ A great challenge

	Not a challenge	A slight challenge	A moderate challenge	A great challenge
A lack of support for blended learning station rotation among school leadership (n=77)	75%	16%	5%	4%
A lack of understanding of blended learning station rotation among school leadership (n=76)	74%	17%	5%	4%
Transitions to/from the online adaptive program and other instructional activities (n=78)	55%	32%	9%	4%
Online adaptive program site not working (n=77)	52%	31%	9%	8%
Not enough teacher training (n=77)	52%	30%	13%	5%
Student login trouble (n=75)	51%	28%	16%	5%
Student's abilities to work independently on a computer using the online adaptive program (n=78)	40%	38%	14%	8%

Percentage of teacher respondents

Source: MOY teacher surveys administered by ORE (January 2019).

Figure 3b. The percentage of teachers saying a lack of support from school leadership was not a challenge was 87% at end-of-year 2018-19 (Cohort 2)

■ Not a challenge ■ A slight challenge ■ A moderate challenge ■ A great challenge

	Not a challenge	A slight challenge	A moderate challenge	A great challenge
A lack of support for blended learning station rotation among school leadership (n=113)	87%	11%	1%	2%

Percentage of teacher respondents
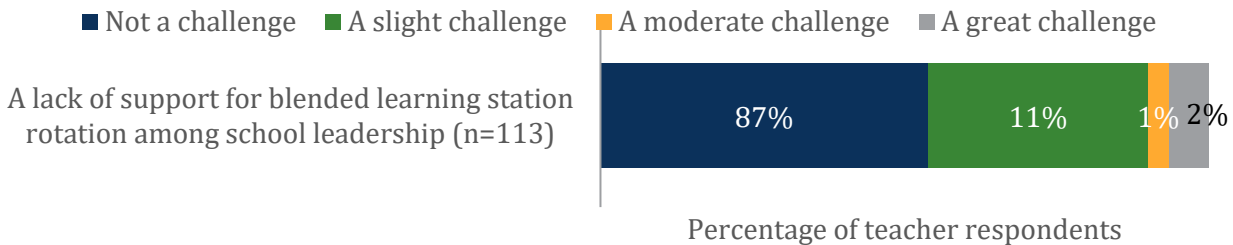
Source: EOY teacher surveys administered by ORE (May 2019).

Teachers reported that they rarely or never had trouble accessing the WiFi (66% at MOY 2018-19 and 82% at EOY 2018-19 said it was not a challenge; Figures 4a-4b). About two-thirds of teachers (68%) at MOY 2018-19 said they rarely or never experienced problems with the hardware (Figure 4a).

Figure 4a. About two-thirds of teachers never or rarely experienced problems with WiFi and hardware at middle-of-year 2018-19 (Cohort 2)
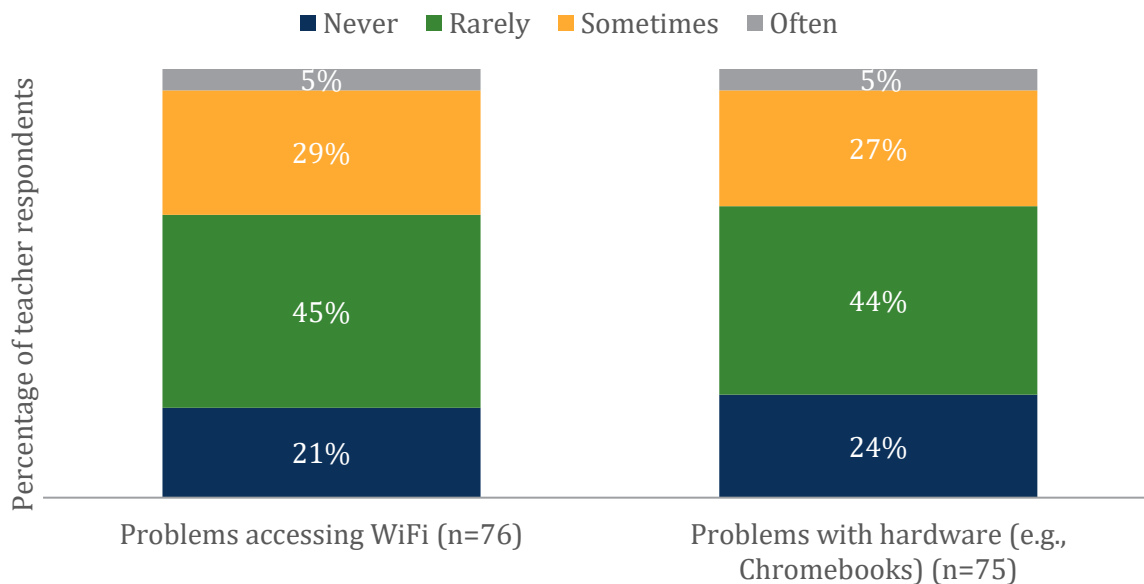
Source: MOY teacher surveys administered by ORE (January 2019).

Figure 4b. 82% of teachers never or rarely experienced problems with WiFi at end-of-year 2018-19 (Cohort 2)
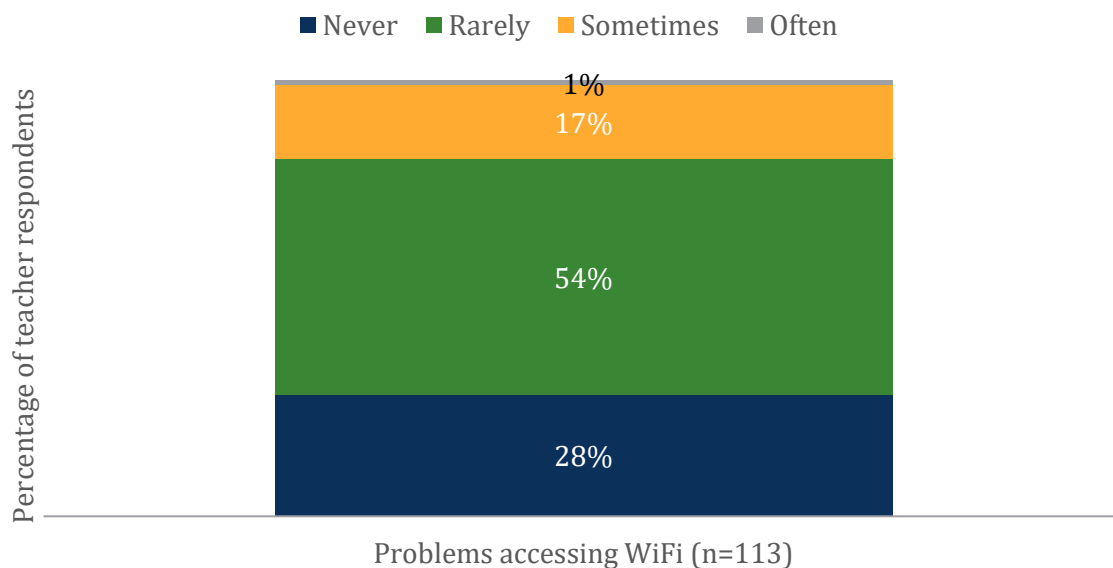
Source: EOY teacher surveys administered by ORE (May 2019).

Teachers' survey responses about coaches were overwhelmingly positive.

Teachers answered 12 questions about their coaches (Table 2). Teachers overwhelmingly rated coaches positively, with the percentage of respondents agreeing or strongly agreeing with positive statements ranging from 94% to 100% (Figure 5). Survey questions asked about communication, support provided, and how effectively the coach conducted certain tasks, like modeling a blended learning component.

Table 2. Teacher survey questions about coaches

Question Text	Label in Figure 5
My coach communicates effectively.	Communicates effectively
My coach responds to my requests for assistance in a timely manner (responds within 48 hours).	Responsive
My coach provides me with resources to help meet the needs for my station rotation model environment.	Provides resources
My coach is knowledgeable about instructional strategies for implementing the station rotation model in my learning environment.	Knowledgeable
My coach is willing to spend the time needed to support me.	Willing to spend time
My coach has been a valuable resource to my understanding and execution of blended learning in my classroom.	Valuable resource
My coach troubleshoots and manages issues that may impeded blended learning in the classroom.	Troubleshoots
My coach has effectively modeled a component(s) of blended learning for me.	Modeled a component
My coach has effectively co-taught a lesson(s) with me.	Co-taught a lesson
My coach has effectively assisted me with blended learning management strategies (classroom design, scheduling, grouping, transitions, anchor charts, technology support, etc.).	Management strategies
My coach effectively assisted me with strategies to better engage students (what's in each station, use of SmartBoards, other technology, student jobs, incentive systems, etc.).	Student engagement strategies
My coach effectively assisted me with strategies to individualize instruction (using school assessments and/or online adaptive programs).	Instruction strategies

Note: Response options were strongly agree, agree, disagree, and strongly disagree.

Figure 5. Teacher ratings of coaches (January 2019, Cohort 2)

■ Strongly agree   ■ Agree   ■ Disagree   ■ Strongly disagree

	Strongly agree	Agree	Disagree
Knowledgeable (n=61)	66%	34%	
Willing to spend time (n=62)	65%	35%	
Responsive (n=63)	65%	35%	
Communicates effectively (n=63)	63%	37%	
Troubleshoots (n=62)	63%	35%	2%
Provides resources (n=63)	63%	35%	2%
Valuable resource (n=62)	61%	35%	3%
Student engagement strategies (n=53)	57%	43%	
Modeled a component (n=47)	57%	40%	2%
Instruction strategies (n=50)	56%	42%	2%
Co-taught a lesson (n=36)	53%	42%	6%
Management strategies (n=54)	52%	48%	

Percentage of teacher respondents

Source: MOY Teacher surveys administered by ORE (January 2019).

Teachers also provided positive feedback about their coaches in the open-ended comments. When asked in what specific ways coaching helped them implement blended learning, teachers mainly mentioned coaches teaching them strategies and skills and providing resources. Examples of strategies included "We problem-solved certain management situations and determined what was best for the students in my class" and "We discussed the layout of my room and how to best utilize my space for blended learning." Skills that teachers mentioned included "how to track my students' growth" and "lessons on using the components of Google Classroom." Teachers also said coaches provided resources such as lesson plans, an example schedule, and links to websites that teachers could use with students. When asked for ways that coaching changed their practice, teachers most often highlighted new skills they learned from their coach: one teacher responded, "I have been able to better my classroom procedures, create better groups, and use technology in my classroom to a greater degree," and another wrote, "I have been able to enhance my use of Google Classroom to make the most of my blended learning stations."

Principals' self-assessment scores increased from the beginning to the end of the school year.

Principals at BLI schools completed a self-assessment of blended learning implementation progress at the beginning (BOY; September/October 2018) and end (EOY; June 2019) of the 2018-19 school year (see Appendix B for the tool, including descriptions of each component and the rating scales). Average scores on the ten components at BOY ranged from 1.92 to 2.92 (out of 4.0; see Table 3). At EOY, the scores ranged from 2.62 to 3.61. The Format of Professional Learning component was lowest at BOY and EOY, and Technical Support and Participation in Professional Learning were high at both points. The Blended Learning Goals component had the highest average change (+0.81).

Table 3. Principal self-assessment scores (on a 4-point scale where 1 is low and 4 is high)

Domain	Component	Average BOY Score (n=25)	Average EOY Score (n=24)	Average Change* (n=21)
Leadership	Blended Learning Goals	2.08	2.92	+0.81
	Continuous Improvement	2.12	2.70	+0.5
Infrastructure and Technical Support	Classroom Design	2.44	3.17	+0.67
	Classroom Management Strategies	2.28	3.0	+0.67
	Technical Support	2.84	3.61	+0.67
Content and Instruction	Rotation Model	2.44	3.04	+0.43
	Data-Informed Instruction	1.96	2.62	+0.58
Professional Learning	Focus	2.0	2.74	+0.60
	Format	1.92	2.65	+0.76
	Participation	2.92	3.35	+0.48

Source: Principal self-assessment ratings.

*Only includes schools with both BOY and EOY scores.

How did teacher perceptions in Cohort 2 differ from Cohort 1?

We compared 2018-19 survey results (from the first year of Cohort 2) to 2016-17 survey results (from the first year of Cohort 1) to see if teachers in the second cohort felt more positively about blended learning, the support they received, or if they experienced different challenges. Additionally, providing coaching to teachers was a new feature of Cohort 2.[1] Comparison survey questions are only included if responses varied between middle-of-year 2018-19 and the first year of Cohort 1 (2016-17). Because teachers in the first year of Cohort 1 were surveyed only at middle-of-year, we use middle-of-year 2018-19 results as the comparison between 2018-19 and 2016-17.

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[1]Differences in survey responses between 2016-17 and 2018-19 may be because there were different teachers participating, additional supports (including coaching), or a change in approved OAPs, but we cannot determine exact causes. However, these changes provide important context for program implementation.

Teachers in Cohort 2 reported using data to differentiate instruction and create student groups more often than teachers in Cohort 1.

The percentage of teachers who said they accessed student progress data at least weekly in Cohort 2 (84%; see Figure 1) was higher than the rate at the same time in Cohort 1 (72%, see Figure 6). The percentage of teachers who said they used data to differentiate instruction at least weekly (71%) was also higher than Cohort 1 (54%). The percentage of teachers in Cohort 2 who said they used data to create student groups at least monthly (75%) was higher than Cohort 1 (64%).

Figure 6. Teachers participating in the Blended Learning Initiative identified how often they accessed and used student data at the middle-of-year in 2016-17 (Cohort 1)
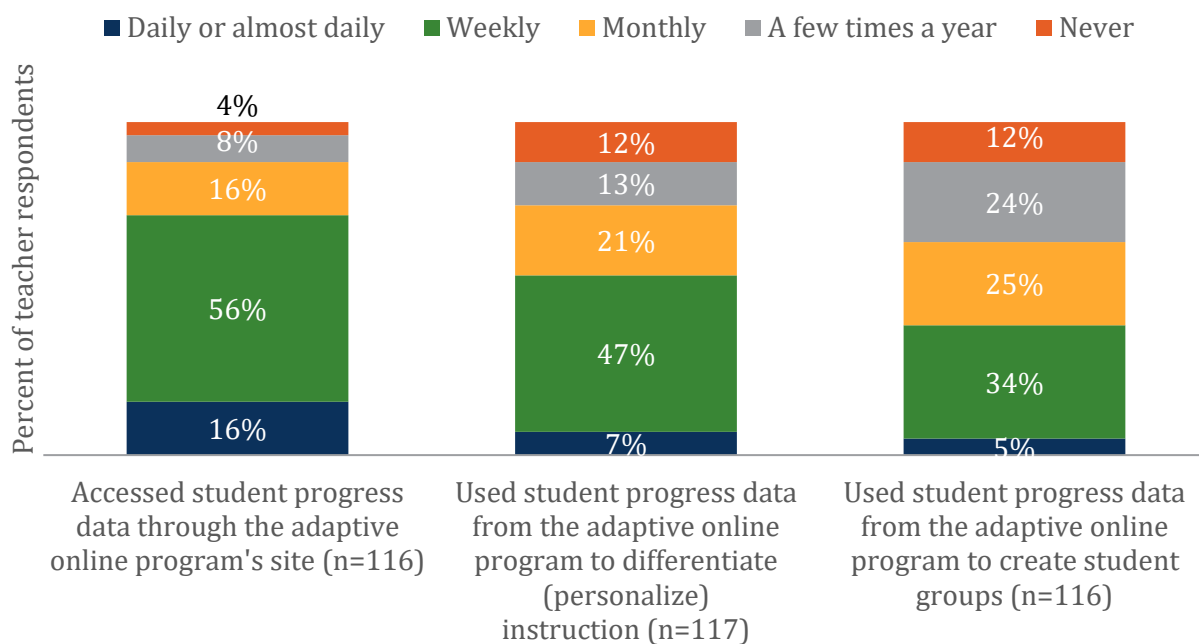
Source: Teacher surveys administered by ORE in MOY 2016-17.

Teachers in Cohort 2 identified great or moderate benefits to their classroom more often than teachers in Cohort 1.

The percentage of teachers identifying great or moderate benefits to their classroom from the BLI was higher in Cohort 2 than Cohort 1 for increased classroom engagement (81% in 2018-19, see Figure 2, and 68% in 2016-17, see Figure 7), increased student academic interest in math, reading, and other subjects (67% in 2018-19 and 60% in 2016-17), and for improved classroom management (70% in 2018-19 and 66% in 2016-17).

Figure 7. Teacher impression of classroom benefits from the Blended Learning Initiative in middle-of-year 2016-17 (Cohort 1)
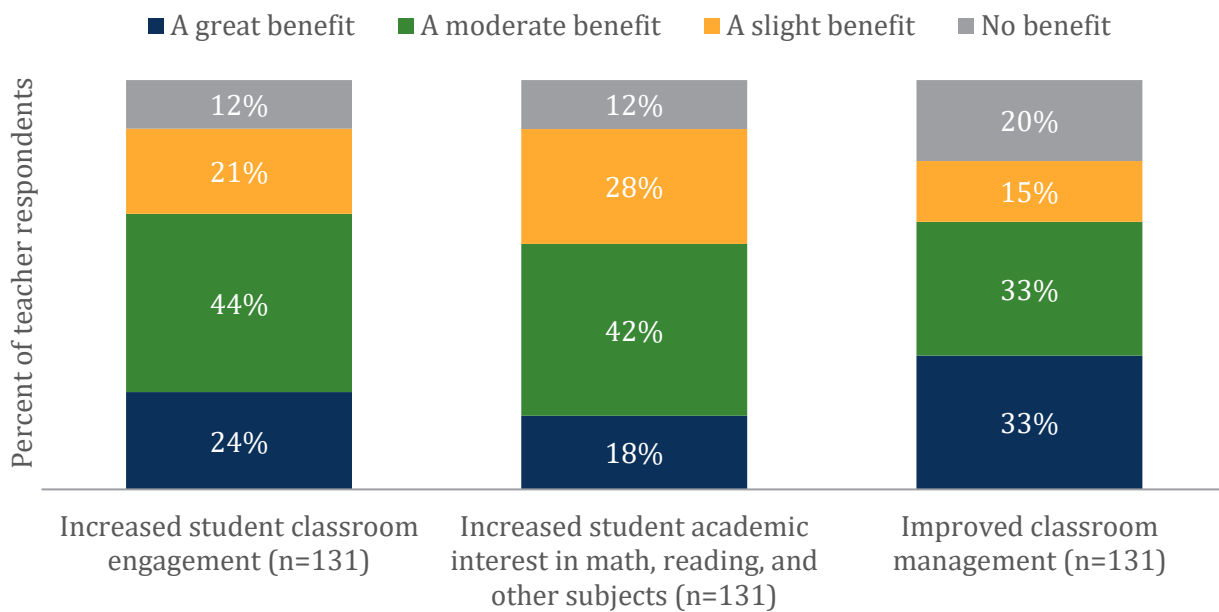
Source: Teacher surveys administered by ORE in MOY 2016-17.

Teachers in Cohort 2 rated teacher training as less of a challenge than teachers in Cohort 1.

About a third (34%) of respondents rated teacher training as not a BLI implementation challenge in Cohort 1 (Figure 3a) compared to 52% in Cohort 2 (Figure 8).

Figure 8. 34% of respondents rated *teacher training* as not a BLI implementation challenge in middle-of-year 2016-17 (Cohort 1)
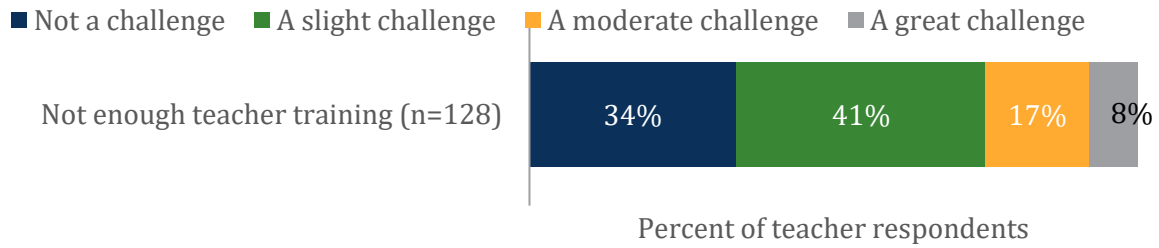
Source: Teacher surveys administered by ORE in MOY 2016-17.

How often did students use the online adaptive programs, and how did this compare to previous years?

Vendors provided student usage data for all students and teachers using OAPs at BLI schools. We only included students in this analysis if they were in a BLI classroom. Some teachers on the list provided by the Office of Educational Technology did not appear in the data for the assigned vendor. The list of teachers implementing blended learning may not match the list of teachers provided to the Office of Educational Technology at the beginning of the initiative due to fluctuations at the school in teacher assignments, retention, or other scheduling needs. Imagine Math was missing the most teachers (Table 4).

Table 4. Number of teachers listed as participating by SDP who did not appear in the OAP data

Online Adaptive Program (OAP)	Number of Teachers Missing
Achieve3000	2
Edgenuity Pathblazer	5
Edgenuity MyPath Math	2
Edgenuity MyPath Reading	0
Imagine Language & Literacy	0
Imagine Math	10
iReady Reading	0
iReady Math	3
Learning A-Z Raz Kids	5
Lexia	8
ThinkCERCA	0

Source: Student OAP usage data provided by vendors and list of teachers provided by the Office of Educational Technology.

Student OAP usage was generally lower than the recommended amount.

Vendors provided the recommended targets for student data, both for usage (how often the student uses the OAP) and achievement (usually a pass rate or other indicator of mastery of content). There were 18 usage targets across the 12 vendors. On average, students across all the BLI schools and classrooms met the recommended target for three of the 18 metrics (those three metrics are **bolded** in Table 5). **When looking at classroom-level student usage, out of the 237 classrooms participating[2], there were 83 instances[3] where a classroom met a recommended OAP usage target.**

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[2] This number reflects teachers on the list provided by the Office of Educational Technology who appeared in the vendor data.

[3] Classrooms were counted as more than one instance if they met a usage target for more than one OAP.

Table 5. Average Student OAP usage, and schools and classrooms meeting targets, 2018-19 (per week, unless otherwise noted)

OAP	Metric Target*	Average Student Usage across all BLI Classrooms*	Schools that Met Target	Classrooms that Met Target
Achieve3000	2-3 lessons	1.9 lessons	50% 2 of 4 schools	48% 10 of 21 classrooms
	90 minutes	43.2 minutes	0% 0 of 4 schools	5% 1 of 21 classrooms
Edgenuity Pathblazer Math	4 activities	**4.0 activities**	67% 2 of 3 schools	43% 3 of 7 classrooms
	60-90 minutes	34.6 minutes	33% 1 of 3 schools	29% 2 of 7 classrooms
Edgenuity Pathblazer Reading	4 activities	2.1 activities	0% 0 of 2 schools	0% 0 of 5 classrooms
	60-90 minutes	23.1 minutes	0% 0 of 2 schools	0% 0 of 5 classrooms
Edgenuity My Path Math	3-4 activities	**3.8 activities**	50% 1 of 2 schools	40% 2 of 5 classrooms
	4-5 hours	0.5 hours	0% 0 of 2 schools	0% 0 of 5 classrooms
Edgenuity My Path Reading	3-4 activities	**3.6 activities**	100% 1 of 1 school	50% 1 of 2 classrooms
	4-5 hours	0.38 hours	0% 0 of 1 school	0% 0 of 1 school
iReady ELA	45 minutes	29.5 minutes	13% 1 of 8 schools	22% 12 of 55 classrooms
iReady Math	45 minutes	31.6 minutes	9% 1 of 11 schools	22% 16 of 74 classrooms
Imagine Learning & Literacy	50-100 minutes	31.3 minutes	0% 0 of 1 school	22% 2 of 9 classrooms
Imagine Math	60-90 minutes	22.6 minutes	0% 0 of 6 schools	0% 0 of 21 classrooms
	2-3 lessons	1.1 lessons	0% 0 of 6 schools	10% 2 of 21 classrooms
Learning A-Z Raz Kids	90 minutes	21.7 minutes	0% 0 of 3 schools	0% 0 of 22 classrooms
Lexia	60-100 minutes	58.6 minutes	56% 5 of 9 schools	44% 32 of 73 classrooms
ThinkCERCA	10 lessons per year	3.9 lessons per year	0% 0 of 1 school	0% 0 of 3 classrooms

*Targets and classroom-level averages are provided per week (unless otherwise noted).
Bolded text indicates that the average usage for all BLI classrooms met the recommended target.
Source: Student OAP usage data provided by vendors. Teacher list provided by the Office of Educational Technology.

There were nine achievement targets across the 12 vendors. On average, students across all BLI schools and classrooms only met the recommended target for three of the nine metrics (those three metrics are **bolded** in Table 6). Of those three target metrics, two were met by 100% of participating classrooms.

Table 6. Average Student OAP achievement, and schools and classrooms meeting targets, 2018-19

OAP	Metric Target	Average Student Achievement across All BLI Classrooms	Schools Meeting Target	Classrooms Meeting Target
Achieve3000	75+% average first-try score	64.2% first-try score	0% 0 of 4 schools	5% 1 of 21 classrooms
Edgenuity Pathblazer Math	70% mastery	67.8% mastery	67% 2 of 3 schools	43% 3 of 7 classrooms
Edgenuity Pathblazer Reading	70% mastery	60.6% mastery	50% 1 of 2 schools	40% 2 of 5 classrooms
Edgenuity My Path Math	70% mastery	**77.0% mastery**	100% 2 of 2 schools	100% 5 of 5 classrooms
Edgenuity My Path Reading	70% mastery	**86.5% mastery**	100% 1 of 1 schools	100% 2 of 2 classrooms
iReady ELA	70% pass rate	62.1% pass rate	13% 1 of 8 schools	35% 19 of 55 classrooms
iReady Math	70% pass rate	**73.3% pass rate**	73% 8 of 11 schools	69% 51 of 74 classrooms
Imagine Math	80% pass rate	53.3% pass rate	0% 0 of 6 schools	5% 1 of 21 classrooms
Learning A-Z Raz Kids	80% pass rate	75.1% pass rate	33% 1 of 3 schools	18% 4 of 22 classrooms

Source: Student OAP usage data provided by vendors. Teacher list provided by the Office of Educational Technology. Bolded text indicates that the average usage for all BLI classrooms met the recommended target.

Student OAP usage was a consistent challenge for both cohorts.

Meeting usage targets for OAPs was a consistent challenge for both cohorts of the Blended Learning Initiative (for Cohort 1 in 2016-17 and 2017-18 and Cohort 2 in 2018-19). Each year, OAPs provided usage targets for their programs. In 2016-17 and 2017-18, some OAPs also chose to provide an achievement target. In 2018-19, OAPs were required to provide an achievement target. BLI classrooms, on average, met 25% of the usage targets in 2016-17, 10% in 2017-18, and 17% in 2018-19 (Table 7; for a full list of metrics for 2018-19, see Table 5). However, BLI classrooms, on average, met 100% of the achievement targets in 2016-17 and 2017-18 and 33% in 2018-19. Students do not have to meet the usage target to be included in the achievement metric.

Table 7. Comparison of student data metrics across three years

School Year	Cohort	**Usage** Metrics where Student Average for BLI Classrooms met Recommended Target	**Achievement** Metrics where Student Average for BLI Classrooms met Recommended Target
2016-17	Cohort 1	25% 3 of 12 metrics	100% 3 of 3 metrics
2017-18	Cohort 1	10% 1 of 10 metrics	100% 1 of 1 metrics
2018-19	Cohort 2	17% 3 of 18 metrics	33% 3 of 9 metrics

Source: Student OAP usage data provided by vendors. Teacher list provided by the Office of Educational Technology.

Between 2017-18 and 2018-19, the District put out a new request for proposals for blended learning programs and updated the list of approved vendors. Only three OAPs were on the approved list in both 2017-18 and 2018-19 and had the same usage metrics in both years. Achieve3000 had higher usage in 2018-19 than in 2017-18, Imagine Math usage was about the same in both years, and ThinkCERCA had higher usage in 2017-18 (Table 8).

Table 8. Comparison of student data metrics for vendors in 2017-18 and 2018-19

Online Adaptive Program (OAP)	Metric Target	District Usage (All BLI Classrooms) 2017-18	Schools that Met Target 2017-18	District Usage (All BLI Classrooms) 2018-19	Schools that Met Target 2018-19
Achieve3000	2-3 lessons per week	1.1 lessons per week	5% 1 of 19 schools	1.9 lessons/week	50% 2 of 4 schools
Imagine Math	60-90 minutes per week	28.5 minutes per week	0% 0 of 13 schools	22.6 minutes/week	0% 0 of 6 schools
ThinkCERCA	10 lessons per year	9.1 lessons per year	33% 2 of 6 schools	3.9 lessons/year	0% 0 of 1 school

Source: Student OAP usage data provided by vendors. Teacher list provided by the Office of Educational Technology.

What were the characteristics of schools where students met the OAP usage targets?

Principals at schools that met a usage target rated themselves higher at BOY on four metrics and higher at EOY on all metrics.

Twelve schools met at least one usage target in 2018-19. Principals at these schools rated themselves higher on the PERC assessment[4] in the beginning of the year on four metrics: Blended Learning Goals (Leadership), Continuous Improvement (Leadership), Rotation Model (Content and Instruction), and Data-Informed Instruction (Content and Instruction). At the end of the year, these principals rated themselves higher on all metrics compared to principals of schools that did not meet the usage targets. Principals at schools meeting a usage target also had larger changes from the beginning to the end of the year on all metrics except for one (Blended Learning Goals).

A higher percentage of teachers met a usage target at expansion schools.

At the teacher level, a higher percentage of teachers at expansion schools (those that participated in both cohorts) had students meet a usage target compared to teachers at schools who only participated in Cohort 2 (Table 9). Teachers were counted as meeting the classroom usage target if the students in their classrooms met, on average, at least one target for at least one OAP (some teachers used multiple OAPs and some OAPs had more than one target).

Table 9. A higher percentage of teachers at expansion schools met a usage target

	New Schools (Cohort 2 Only) (n=192)	Expansion Schools (Cohort 1 and Cohort 2) (n=46)
Classrooms that did not meet usage target	72.9%	65.2%
Classrooms that met usage target*	27.1%	34.8%

*Teacher had to meet at least one usage target for at least one OAP.
Source: Student OAP usage data provided by vendors. Teacher list provided by the Office of Educational Technology.

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[4] Information about the PERC assessment can be found on page 15 of this report, and the assesssment can be found in Appendix B.

A similar percentage of teachers who received coaching met a usage target compared to those who did not receive coaching.

Across all schools, a similar percentage of teachers who received coaching met a usage target compared to teachers who did not receive coaching (Table 10). Teachers who received coaching and whose students met a usage target received an average of 4.29 coaching sessions, compared to 4.31 for teachers who received coaching but did not meet a usage target.

Table 10. A similar percentage of teachers who received coaching met a usage target compared to those who did not receive coaching

	No Coaching (n=72)	Received Coaching (n=166)
Classrooms that did not meet usage target	72.2%	71.1%
Classrooms that met usage target*	27.8%	28.9%

*Teacher had to meet at least one usage target for at least one OAP.
Source: Student OAP usage data provided by vendors. Teacher list provided by the Office of Educational Technology.

How frequently did staff from the Office of Educational Technology provide BLI coaching sessions, and what was the pedagogical focus?

Staff members from the Office of Educational Technology offered coaching sessions to teachers on implementing blended learning. About three-quarters of BLI schools (24 of 32) participated in coaching, with 196 teachers receiving at least one session. Of the 237 teachers who were included in the usage data analyses in the previous section, 166 received coaching (see Figure 6). Of the 196 teachers who received at least one coaching session, teachers had an average of four sessions.

Figure 6. 267 teachers were in at least one data source

30 teachers received coaching but did not appear in usage data

71 teachers appeared in usage data but did not receive coaching

166 teachers appeared in both usage data and coaching data
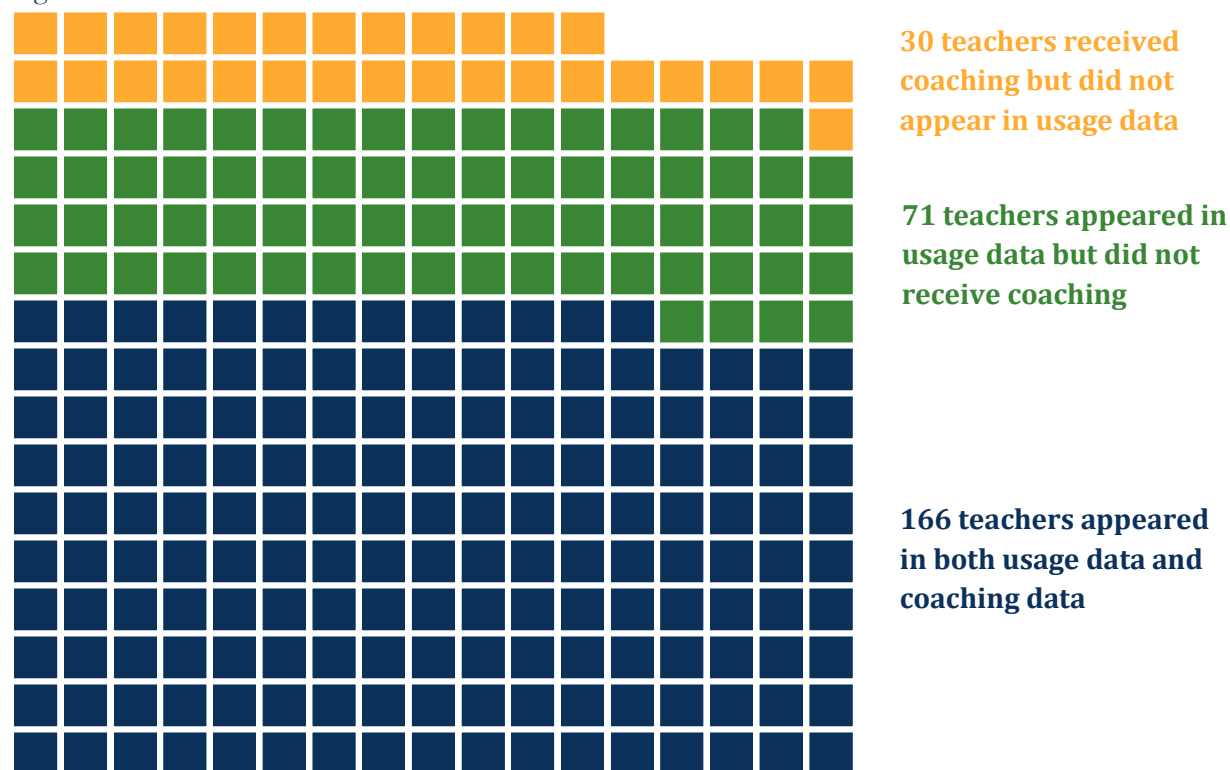
Coaches conducted almost 800 sessions, most often focused on co-planning.

There were four six-week coaching cycles, with each cycle progressing from foundational to more advanced skills. Coaches conducted almost 800 sessions over the four cycles, with an average session length of 46 minutes (Table 11). Out of five focus areas, sessions focused most often on co-planning (399 sessions), followed by conferencing for feedback (180 sessions; see Table 12).

Table 11. Coaches conducted approximately 800 sessions with 196 teachers in 2018-19

Cycle	Dates	Number of Coaching Sessions	Average Session Length
1	September 4-October 12	228	40 minutes
2	October 15-November 21	161	54 minutes
3	November 26-December 21	130	48 minutes
4	January 7-February 8*	277	45 minutes
Total	September 4-February 8	796	46 minutes

Source: Coaching logs completed by Office of Educational Technology staff.
*One coach continued to provide coaching through the end of the school year.

Table 12. Coaching sessions most often focused on co-planning in 2018-19

Coaching Focus	Example Goal	Number of Sessions Where Area was Primary Focus	Number of Sessions Where Area was Secondary Focus
Co-planning	"Create incentive systems for students to maintain stamina and engagement in adaptive program."	399 sessions	25 sessions
Conferencing for feedback	"This is the first day this class is rotating. Today's goal is to observe and give feedback on the implementation so far."	180 sessions	53 sessions
Co-teaching	"I am helping her hands-on in her class for her double period then following up with her on prep."	97 sessions	20 sessions
Conferencing for goal setting	"Teacher would like to develop better classroom management in her stations."	77 sessions	61 sessions
Modeling	"Model whole group, release, and one rotation."	43 sessions	22 sessions

Source: Coaching logs completed by Office of Educational Technology staff.

How did coaches rate teacher implementation of the BLI model?

Each six-week cycle had space for four to six coaching sessions, which could have been in-classroom support, co-planning or conferencing with the teacher, or meeting with multiple teachers. When visiting classrooms, coaches had a list of 16 "look fors" to gauge teachers' blended learning implementation (see Appendix C). The rating scale options were not met, partially met, or completely met. Coaches generally rated teachers at least <u>twice</u> per cycle (whenever schedules allowed) unless the classroom was in good standing ("Completely Met") within the cycle or the coach could not observe the teacher due to absence or a change of scheduled visit. Coaches did not rate teachers during co-planning, conferencing, or group meetings.

Teachers improved their implementation metrics between the first and second rating.

Teachers improved on almost all metrics from their first rating to their second (Figures 9a-d). Two metrics that had very small numbers of ratings were not included here.

Figure 9a. Coach ratings of teacher implementation in 2018-19
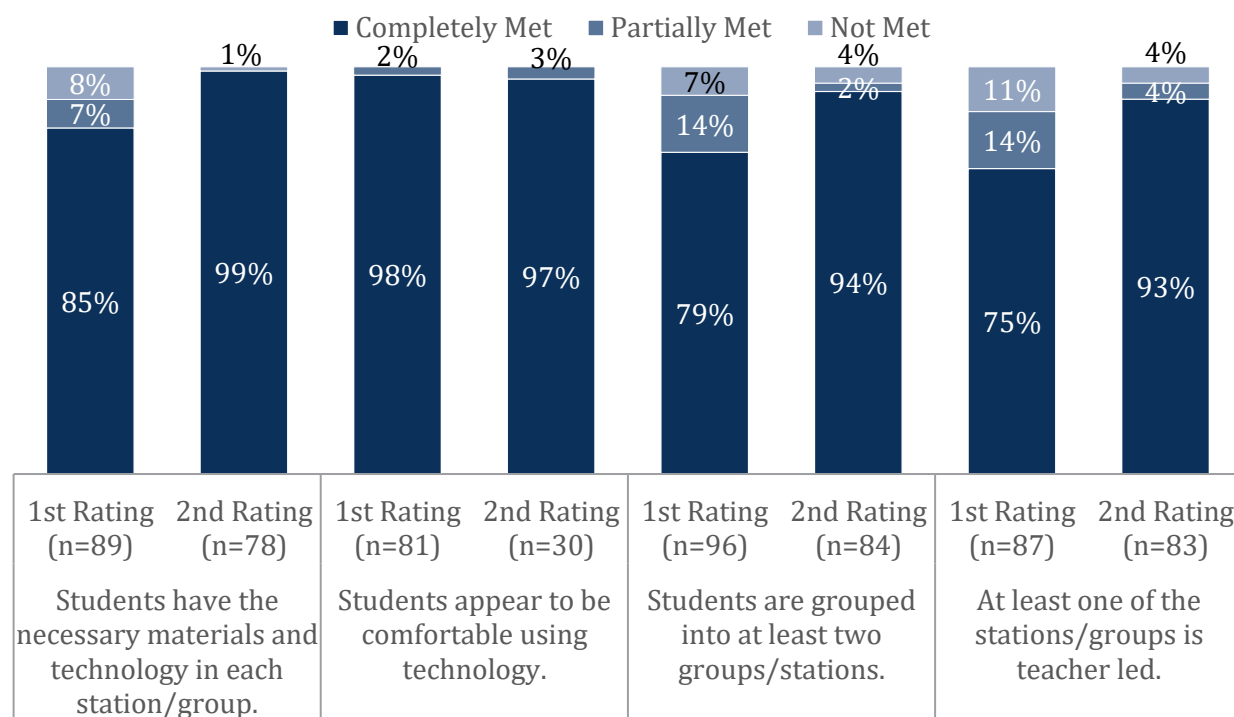
Source: Coaching logs completed by Office of Educational Technology staff.

Figure 9b. Coach ratings of teacher implementation in 2018-19

Legend: ■ Completely Met ■ Partially Met ■ Not Met

1st Rating (n=59)	2nd Rating (n=51)	1st Rating (n=91)	2nd Rating (n=80)	1st Rating (n=76)	2nd Rating (n=30)	1st Rating (n=66)	2nd Rating (n=71)
Not Met: 22%	2%	8%	4%	1%	10%	14%	4%
Partially Met: 12%	6%	12%	5%	14%	10%	14%	8%
Completely Met: 66%	92%	80%	91%	84%	90%	73%	87%

Teacher provides roles for students during set up and transitions.	Students in at least one of the stations/groups are using the adaptive online program.	Student groups are created intentionally (using data from the adaptive online program or other instructional data).	Teacher conducts a whole group lesson before releasing students into stations.

Source: Coaching logs completed by Office of Educational Technology staff.

Figure 9c. Coach ratings of teacher implementation in 2018-19

Legend: ■ Completely Met ■ Partially Met ■ Not Met

1st Rating (n=81)	2nd Rating (n=29)	1st Rating (n=133)	2nd Rating (n=96)	1st Rating (n=78)	2nd Rating (n=30)
Not Met: 17%	7%	7%	5%	12%	3%
Partially Met: 7%	7%	16%	9%	8%	13%
Completely Met: 75%	86%	77%	85%	81%	83%

Teacher shares student progress/achievement data.	There are clear designated spaces for teacher-led instruction and student-led/independent work.	Teacher is using an incentive/accountability system to ensure students are completing independent work.

Source: Coaching logs completed by Office of Educational Technology staff.

Figure 9d. Coach ratings of teacher implementation in 2018-19

Legend: ■ Completely Met   ■ Partially Met   ■ Not Met

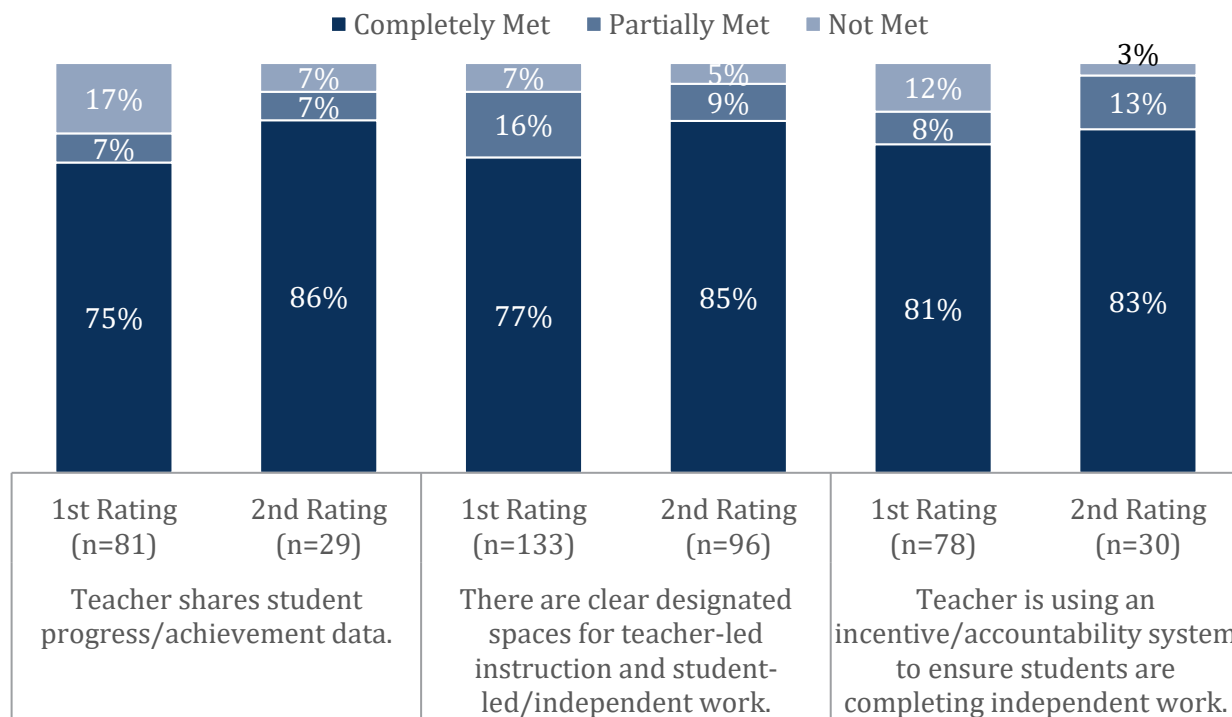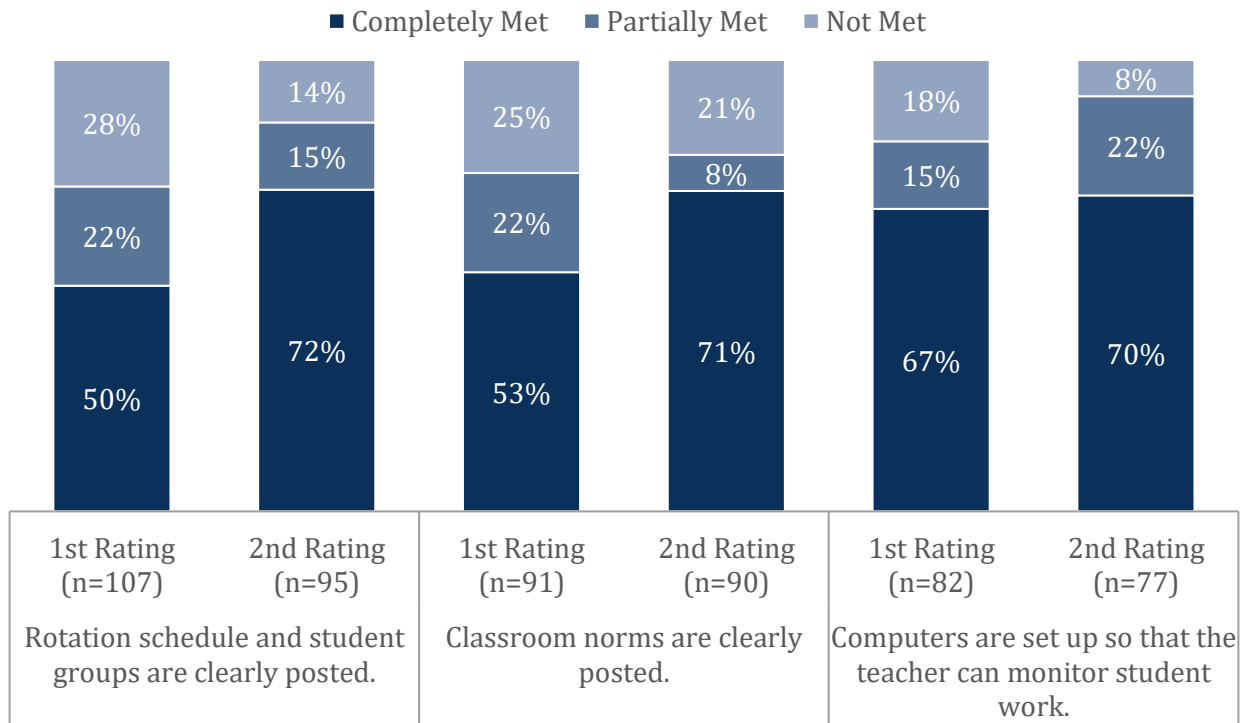|	Rotation schedule and student groups are clearly posted.		Classroom norms are clearly posted.		Computers are set up so that the teacher can monitor student work.	
	1st Rating (n=107)	2nd Rating (n=95)	1st Rating (n=91)	2nd Rating (n=90)	1st Rating (n=82)	2nd Rating (n=77)
Not Met	28%	14%	25%	21%	18%	8%
Partially Met	22%	15%	22%	8%	15%	22%
Completely Met	50%	72%	53%	71%	67%	70%

Source: Coaching logs completed by Office of Educational Technology staff.

Summary and next steps

During the 2018-19 school year, the first year of the second cohort of the Blended Learning Initiative, we found:

- Most schools struggled to meet the recommended implementation targets provided by the vendors for rotation programs. This was a consistent challenge across both implementation cohorts.
- A higher percentage of teachers reported that they accessed program data on students and used it to inform instruction. Teachers' self-reported data access and use increased in 2018-19 from 2016-17, the first year of Cohort 1.
- Coaches conducted almost 800 sessions with teachers; based on coaches' ratings, teachers improved on implementation over the course of the 2018-19 school year.
- Teachers' survey responses about coaches were overwhelmingly positive.
- Principals' self-assessment scores increased from beginning to end of the school year.
- Compared to Cohort 1, a larger percentage of respondents in 2018-19 said increased student classroom engagement, student academic interest, improved classroom management, and opportunities to differentiate instruction were great benefits of the BLI.
- Teachers in Cohort 2 said that teacher training was less of a challenge than teachers in Cohort 1.

Cohort 2 continued a second year of implementation during the 2019-20 school year. The Office of Research and Evaluation will report on program implementation following the 2019-20 school year.
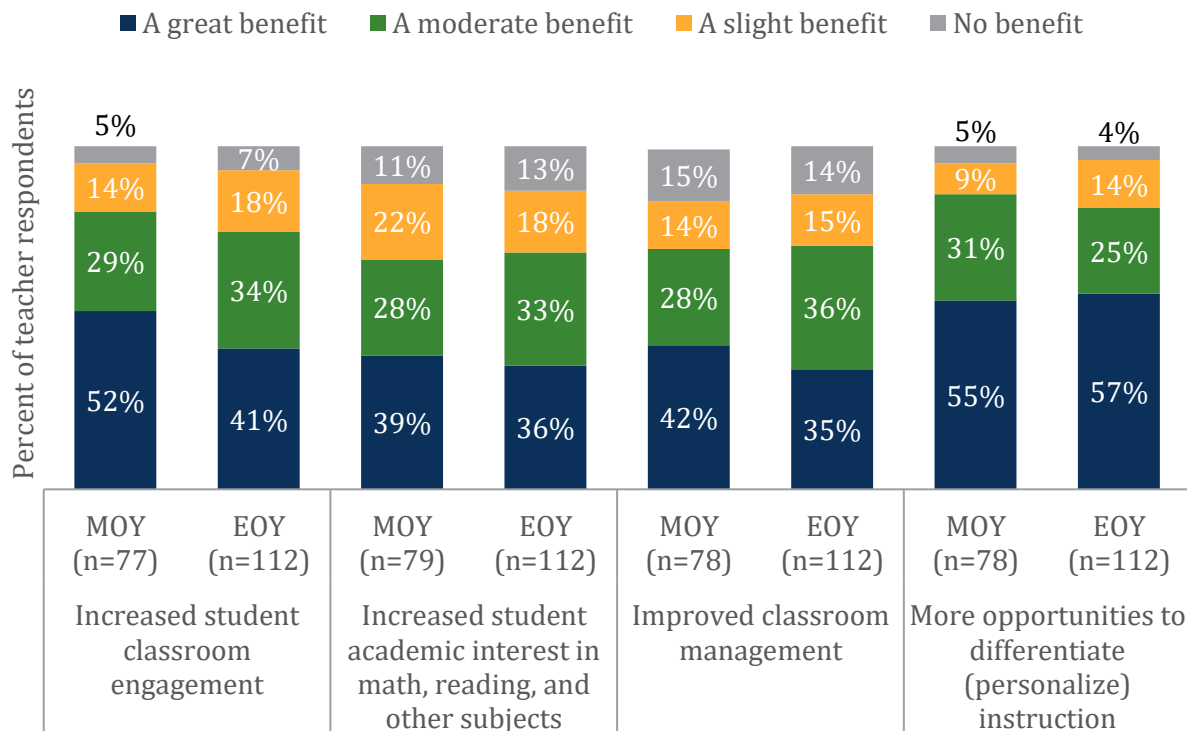
Appendix A: Full 2018-19 Survey Results

Figure A1. Teachers participating in the Blended Learning Initiative identified how often they accessed and used student data
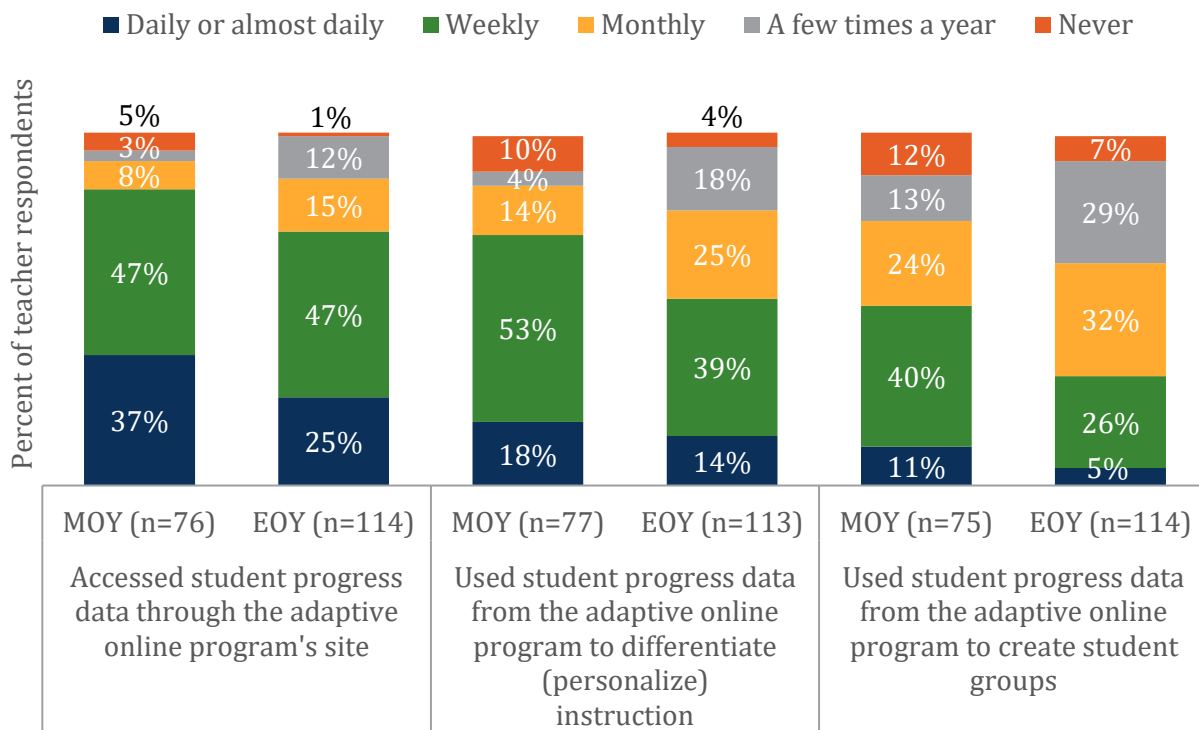
Source: Teacher surveys administered by ORE.
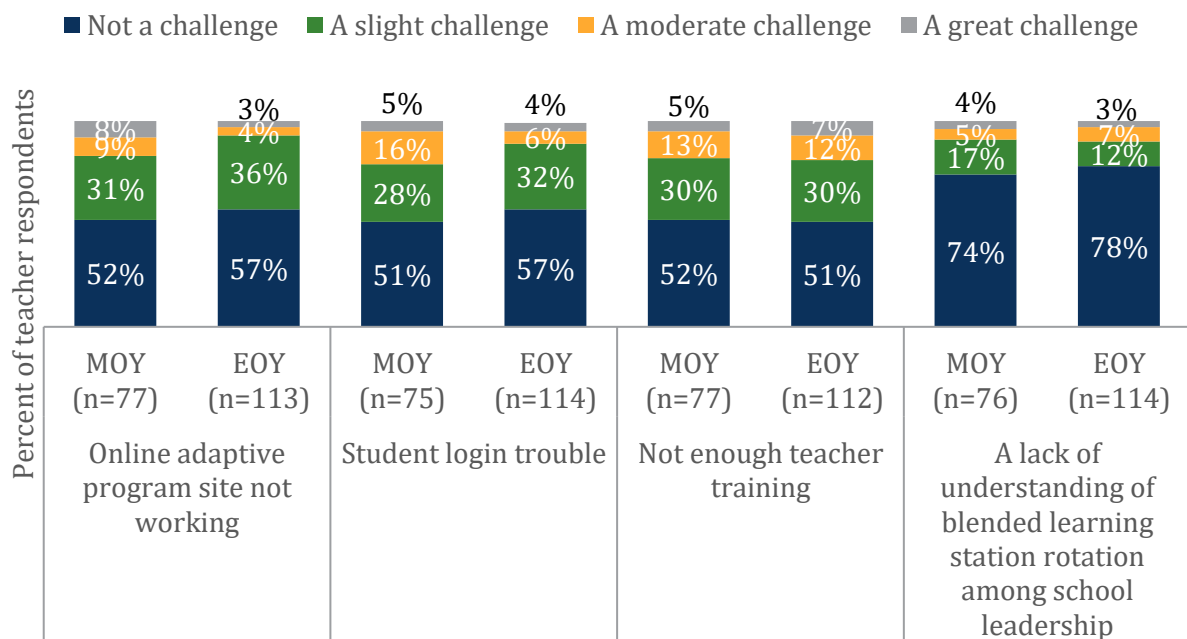**Note**: MOY = middle-of-year (January 2019); EOY = end-of-year (May 2019)

Figure A2. Teacher impression of classroom benefits from the Blended Learning Initiative

■ A great benefit   ■ A moderate benefit   ■ A slight benefit   ■ No benefit

Percent of teacher respondents

	Increased student classroom engagement		Increased student academic interest in math, reading, and other subjects		Improved classroom management		More opportunities to differentiate (personalize) instruction	
	MOY (n=77)	EOY (n=112)	MOY (n=79)	EOY (n=112)	MOY (n=78)	EOY (n=112)	MOY (n=78)	EOY (n=112)
No benefit	5%	7%	11%	13%	15%	14%	5%	4%
A slight benefit	14%	18%	22%	18%	14%	15%	9%	14%
A moderate benefit	29%	34%	28%	33%	28%	36%	31%	25%
A great benefit	52%	41%	39%	36%	42%	35%	55%	57%

Source: Teacher surveys administered by ORE.
Note: MOY = middle-of-year (January 2019); EOY = end-of-year (May 2019)

Figure A3a. Extent of challenges teachers experienced implementing the BLI

■ Not a challenge   ■ A slight challenge   ■ A moderate challenge   ■ A great challenge

Percent of teacher respondents

	Online adaptive program site not working		Student login trouble		Not enough teacher training		A lack of understanding of blended learning station rotation among school leadership	
	MOY (n=77)	EOY (n=113)	MOY (n=75)	EOY (n=114)	MOY (n=77)	EOY (n=112)	MOY (n=76)	EOY (n=114)
A great challenge	8%	3%	5%	4%	5%	7%	4%	3%
A moderate challenge	9%	4%	16%	6%	13%	12%	5%	7%
A slight challenge	31%	36%	28%	32%	30%	30%	17%	12%
Not a challenge	52%	57%	51%	57%	52%	51%	74%	78%

Source: Teacher surveys administered by ORE.
Note: MOY = middle-of-year (January 2019); EOY = end-of-year (May 2019)

Figure A3b. Extent of challenges teachers experienced implementing the BLI

■ Not a challenge   ■ A slight challenge   ■ A moderate challenge   ■ A great challenge

Source: Teacher surveys administered by ORE.
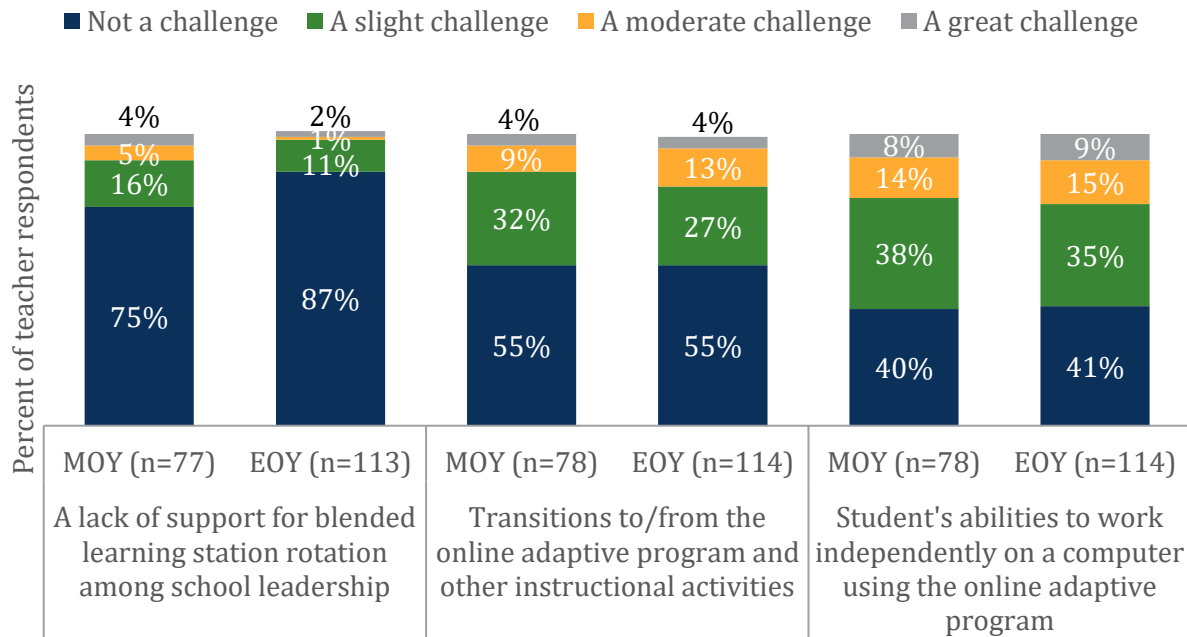**Note**: MOY = middle-of-year (January 2019); EOY = end-of-year (May 2019)

Figure A4. Teachers never or rarely experienced problems with WiFi and hardware

■ Never   ■ Rarely   ■ Sometimes   ■ Often

Source: Teacher surveys administered by ORE.
Note: MOY = middle-of-year (January 2019); EOY = end-of-year (May 2019)

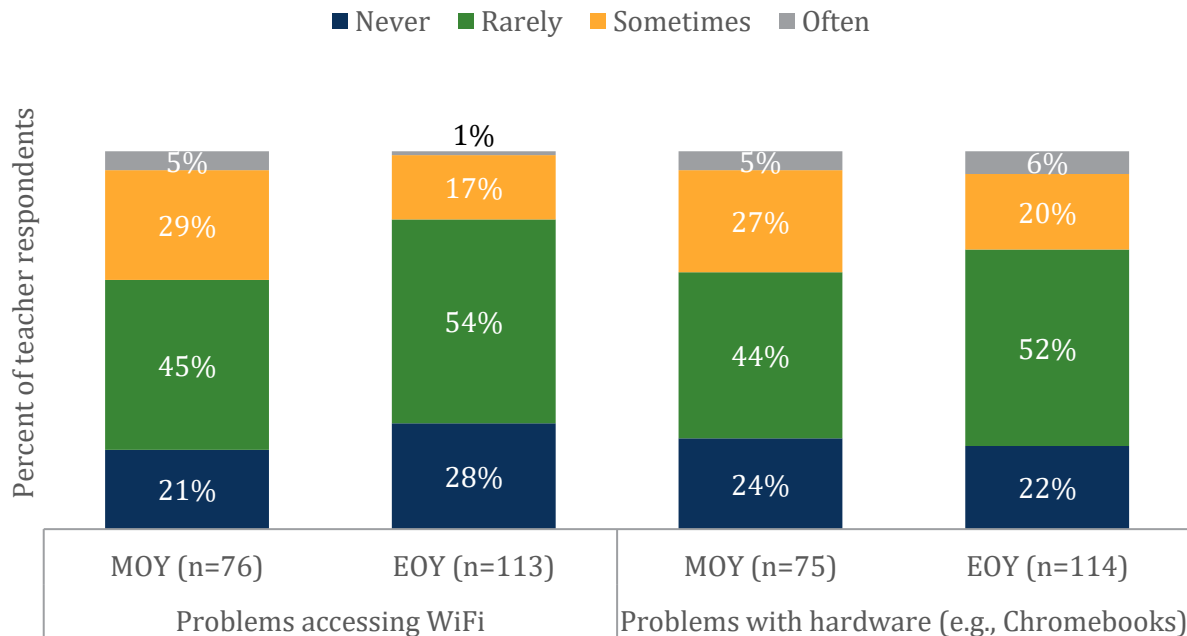# Appendix B: Principal Self-Assessment Tool

BLENDED LEARNING SELF-ASSESSMENT TOOL FOR SCHOOLS

Purpose

The Blended Learning Self-Assessment Tool for Schools should be used as a formative assessment tool to assess implementation progress. The tool is divided into four domains that are essential foci in successful blended learning initiatives. The four domains are as follows:

1. Leadership
2. Infrastructure
3. Content and Instruction
4. Professional Learning

Within each domain is a series of components designed to evaluate specific aspects of a category, such as rotation model and data-informed instruction. Schools will use the rubric to self-assess implementation of each component along an implementation continuum ranging from Entering to Transforming. Table 1 below provides a brief description of each implementation stage.

Table 1. Blended Learning Self-Assessment Tool Implementation Stages

STAGE	DESCRIPTION
Entering	Exploration and exposure to the concept of blended learning, but little or no infrastructure or
Emerging	Focus on laying the groundwork for the structure of the blended learning model
Adapting	Focus on scaling implementation across targeted classrooms
Transforming	Continuous and iterative assessment and refinement of goals, plans, and practice

Directions for Completion

School leadership or blended learning planning teams should work together to complete this self-assessment in June of each school year. For each component:

1. Review the descriptions of each stage.
2. Determine which stage most accurately describes your school at the present time and highlight it. *For schools where blended learning implementation is contained within certain subject areas or teacher groups, please select the option that best describes only those content areas or groups of teachers.*

Additional Resources

To assist schools in analyzing their self-assessment data and strategic planning, PERC created a scoring sheet and strategic planning toolkit.

LEADERSHIP				
	ENTERING (1)	**EMERGING (2)**	**ADAPTING (3)**	**TRANSFORMING (4)**
Blended Learning Goals	Blended learning goals have not been developed.	Blended learning goals are being developed.	Blended learning goals have been developed. Goals are not measurable, achievable, results-focused, and time-bound.	Blended learning goals have been developed. Goals are measurable, achievable, results-focused, and time-bound.
Continuous Improvement	There is no plan to oversee or provide ongoing monitoring of blended learning implementation in terms of quality and fidelity.	A plan is being developed to oversee or provide ongoing monitoring of blended learning implementation in terms of quality and fidelity (e.g., students are completing the minimum minutes per week on online adaptive tools).	A plan has been developed to oversee or provide ongoing monitoring of blended learning implementation in terms of quality and fidelity (e.g., students are completing the minimum minutes per week on online adaptive tools). The monitoring plan is being implemented but not consistently or with fidelity.	A plan for monitoring the quality and fidelity of blended learning implementation has been developed. The monitoring plan is being implemented with fidelity. There is a process for reflecting on and using feedback from monitoring for ongoing curriculum and instructional enhancement.

INFRASTRUCTURE AND TECHNICAL SUPPORT				
	ENTERING (1)	**EMERGING (2)**	**ADAPTING (3)**	**TRANSFORMING (4)**
Classroom Design	Participating blended learning classrooms are not yet designed to provide clearly designated space for teacher-directed instruction and digital work stations.	A few participating blended learning classrooms are designed to provide clearly designated space for teacher-directed instruction and digital work stations.	Many participating blended learning classrooms are designed to provide clearly designated space for teacher-directed instruction and digital work stations.	All participating blended learning classrooms are designed to provide clearly designated space for teacher-directed instruction and digital work stations.
Classroom Management Strategies	Participating blended learning classrooms demonstrate no evidence of routines and strategies for effective classroom management.	Norms are posted in most participating blended learning classrooms, but transitions between activities are time consuming and disorderly. Most students are dependent upon teachers to launch, stay on task, and complete the online learning activities.	Norms are posted in all participating blended learning classrooms. Transitions between activities are efficient and orderly. Most students are dependent upon teachers to launch the online learning activities, but complete the activities with little/no prompting from the teacher.	Norms are posted in all participating blended learning classrooms. Transitions between activities are efficient and orderly. Students are independent in launching and completing the online learning activities.
Technical Support	Technical support for hardware and software is not available at the school or district level.	Technical support for hardware and software is available at the school or district level, but participating blended learning teachers do not know whom to contact when support is needed.	Participating blended learning teachers know whom to contact for technical support for hardware and software, but the process for requesting support is difficult to complete.	Participating blended learning teachers know whom to contact for technical support for hardware and software, and the process for requesting support is well-organized and efficient.

CONTENT AND INSTRUCTION				
	ENTERING (1)	**EMERGING (2)**	**ADAPTING (3)**	**TRANSFORMING (4)**
Rotation Model	In participating blended learning classrooms, instruction is largely teacher-directed. Online adaptive programs are rarely integrated into learning.	In participating blended learning classrooms, online adaptive programs are sometimes integrated into learning.	In participating blended learning classrooms, online adaptive programs are often integrated into lessons, but at less than the minimum minutes per week.	In participating blended learning classrooms, teachers utilize a combination of small group, teacher-led instruction and online adaptive programs to provide students with opportunities to learn and apply skills based on their individual needs.
Data-Informed Instruction	Teachers in participating blended learning classrooms do not yet use online adaptive programs to access data.	Few teachers in participating blended learning classrooms use online adaptive programs to access data to inform instruction.	Many teachers in participating blended learning classrooms use online adaptive programs to access data to scaffold grade-level instruction. Students are grouped using beginning-year data and remain in these groups all year.	All teachers in participating blended learning classrooms use online adaptive programs to access data to scaffold grade-level instruction. Students are grouped based on data, and these groups are periodically adjusted as new data become available.

PROFESSIONAL LEARNING				
	ENTERING (1)	**EMERGING (2)**	**ADAPTING (3)**	**TRANSFORMING (4)**
Focus	PD does not focus on blended learning.	Blended learning PD focuses on use of online adaptive programs (including minimum required vendor PD). PD does not focus on integration of online adaptive programs into learning.	PD focuses on use of online adaptive programs (including vendor PD as needed) and ways to combine small group, teacher-led instruction with online adaptive programs to provide students with opportunities to learn and apply skills based on their individual needs.	PD focuses on use of online adaptive tools (including vendor PD as needed); ways to combine small group, teacher-led instruction with online adaptive programs to provide students with opportunities to learn and apply skills based on their individual needs; and use of online adaptive program data to scaffold grade-level instruction.
Format	PD is typically delivered in a single modality.	PD is typically delivered using multiple modalities.	PD is typically delivered using multiple modalities and uses evidence-based strategies for adult learning.	PD is typically delivered using multiple modalities (including job-embedded) with many opportunities for hands-on practice and modeling (e.g., mentorship, coaching, web-based videos of model classrooms).
Participation	No expectations regarding participation in blended learning PD have been communicated.	Blended learning PD is optional for blended learning teachers.	Blended learning PD is required for all participating teachers.	Blended learning PD is required for all participating teachers and administrators.

Appendix C: Cycle Checklist

Date: Start time: End time:
School: Grade: Subject:
Teacher Name: TPS Name: BLI program:

1. **There are clear designated spaces for teacher-led instruction and student-led/ independent work**

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

2. **Classroom norms are posted**

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

3. **Rotation schedule and student groups are posted**

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

4. **Teacher conducts a whole group lesson before releasing students into stations**

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

5. Students are grouped into at least two groups/stations

Not Met _____   Partially Met _____   Completely Met_____
Did not observe_____

Notes_____

6. At least one of the stations/groups is teacher led

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

7. Students in at least one of the stations/groups are using the adaptive online program

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

8. Students have the necessary materials and technology in each station/group

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

9. Teacher provides roles for students during set up and transitions

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

10. Computers are set up so that the teacher can monitor student work

Not Met ____   Partially Met ____   Completely Met____

Did not observe_____

Notes_____

11. Student transitions between stations/groups do not waste time

Not Met ____   Partially Met ____   Completely Met____

Did not observe_____

Notes_____

12. Students are able to bring and complete station/group work independently after transition

Not Met ____   Partially Met ____   Completely Met____

Did not observe_____

Notes_____

13. Students appear to be comfortable using technology

Not Met ____   Partially Met ____   Completely Met____

Did not observe_____

Notes_____

14. Student groups are created intentionally (using data from the adaptive online program or other instructional data)

Not Met ____   Partially Met ____   Completely Met____

Did not observe_____

Notes_____

15. Teacher shares student progress/achievement data

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____

16. Teacher is using an incentive/accountability system to ensure students are completing independent work

Not Met _____   Partially Met _____   Completely Met_____

Did not observe_____

Notes_____