Michael & Susan Dell FOUNDATION

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Blended Learning in Practice:

Case Studies from Leading Schools

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featuring FIRSTLINE SCHOOLS EDUCATION FOR LIFE

prepared by FSG

Background

FirstLine Schools

Blended Learning at Arthur Ashe Charter School

The clock hanging near the "Weekly Goals" sign hits 1:59, and the 28 students in Ms. Banks' Math class stand up and file to the door. No bell has sounded – the school does not use one – but it is class transition time all the same. Here at Arthur Ashe Charter School, it's transition time in another sense, too, as the students shift from one form of instruction to another.

The students process out of the classroom and down the hall, past college pennants and assessment tracking sheets. Within seconds they are seated again, looking at a computer screen and logging into an online program that remembers who they are and what skills they need to build.

But they will not all be in the same room: 22 of the 28 students will be sitting in a long, narrow computer lab, while their six classmates sit using laptops in a smaller room across the hall. This division of Ms. Banks' class has not happened for a lack of space: there are 60 computers in the lab and often two classes of students in there using them. The division of the class has happened as a means to achieve an important school goal: to be more responsive to students' needs.

The six students in the smaller room are designated as needing either Tier III intervention or special education services. They use online software on their laptops like Vmath and other programs designed to reach students at their level. There is a special education instructor working with them, too. Two years ago, this instructor would have pulled the six of them out of their core Math class, leaving them with less classroom instruction time than their peers.

Of the 22 students in the computer lab, very few are working on the same content. Many are using the same program, but they are doing so at their own pace. Some have raced ahead in the curriculum while others are moving more slowly. And then there are five students doing something entirely different. These are five of the class's Tier II students, and they are receiving what Ashe calls Learning Support. An instructor dedicated

FirstLine at a Glance (2011 – 2012 academic year)

CMO

NAME *FirstLine Schools*

LOCATION *New Orleans, LA*

FOUNDED *1998 under the name Middle School Advocates; changed name to FirstLine Schools in 2008*

NETWORK *5 schools serving 2,418 students[1]; during the 2011-12 school year, 2 schools operated a blended model in Math and English Language Arts (ELA): Arthur Ashe Charter School and Joseph S. Clark Preparatory High School (9th grade only)*

PROJECTED GROWTH *No additional schools are planned at this time; total enrollment is projected to expand to 2,642 by 2015; all 5 schools will be phasing in a blended model over the next two school years[2]*

DEMOGRAPHICS *97% Free/Reduced Lunch, 1.3% English Language Learners, 14% Special Education*

CEO *Jay Altman*

MISSION *To create and inspire great open-admission public schools in New Orleans.*

School Profiled

NAME *Arthur Ashe Charter School*

LOCATION *New Orleans, LA*

FOUNDED *2007*

STRUCTURE *422 students in grades K-8 on an extended 8-hour day*

DEMOGRAPHICS *98% Free/Reduced Lunch, 1% English Language Learners, 26% Special Education*

DIRECTOR *Sabrina Pence*

MISSION *To prepare all students academically while developing their character so they will excel at a high school with rigorous academics and graduate from a four-year college.*

BLENDED LEARNING *A "lab-rotation" model for Math and ELA, including a computer lab setting for Tier I and some Tier II students, and a small group "learning support" structure for SPED and RTI instruction[3]*

just to them is going over specific Math problems in the software which have given the students difficulty. The instructor is responding directly to their needs, at a level which would not have been possible before the school implemented blended learning.

Building a Blended Learning Model

FirstLine Schools started in the early 1990s when it was called Middle School Advocates and began operating the first charter school in New Orleans, New Orleans Charter Middle School (NOCMS), in 1998.[4] When Hurricane Katrina struck on August 29, 2005 – in the first month of the school year – NOCMS sustained significant damage from the resulting floods and was forced to close. In the fall of 2007, Middle School

[1] According to information filed with the state on October 1, 2011. The school-specific information is updated as of March 9, 2012.

[2] Schools across the network have already experimented with educational technology, but Ashe and Clark were the only FirstLine schools last year with a fully designed model.

[3] The 2011 Innosight Institute report "The Rise of K-12 Blended Learning" characterized different types of blended learning models; the "rotation" model involves students rotating "on a fixed schedule between learning online in a one-to-one, self-paced environment and sitting in a classroom with a traditional face-to-face teacher." This May, in "Classifying K-12 Blended Learning," Innosight divided the "rotation" model into four categories, including "lab-rotation," in which "within a given course or subject (e.g., math), students rotate on a fixed schedule or at the teacher's discretion among locations on the brick-and-mortar campus."

[4] The organization had opened the James Lewis Extension School in 1992; this school converted to a charter model and became the New Orleans Charter Middle School in 1998.

Advocates used the NOCMS charter to start Arthur Ashe Charter School, and a year later the organization changed its name to FirstLine Schools. Their new mission was to create and inspire great open-admission public schools in New Orleans.

A Charter Management Organization (CMO), FirstLine Schools now operates a network of five schools in New Orleans, serving more than 2,400 students. With an explicit focus on turnarounds, the CMO has taken over several failing schools: Samuel J. Green Middle School in 2005[5], John Dibert Community School[6] in 2010, and Joseph S. Clark Preparatory High School[7] in 2011. In 2010, FirstLine also began operating Langston Hughes Academy, a preK-8 school that had been failing operationally rather than academically.[8] Although longitudinal achievement results are not yet available for Clark, state test results from FirstLine's other four schools reveal that the organization is making progress in fostering improved student achievement. Arthur Ashe Charter School, in particular, has risen to become one of the top-performing schools in the district, a claim that is accentuated by preliminary 2012 student assessment data. *(See Appendix 1 – Historical Results and Future Growth)* The achievement gap between minority and non-minority students is one of the fundamental problems that FirstLine's schools seek to address and is the main reason why FirstLine adopted a blended learning strategy, believing that the enhanced individualization through blended learning could increase student achievement.[9]

A surprising detail in FirstLine's journey to blended learning is that Jay Altman, the CMO's co-founder and CEO, viewed the approach skeptically until recently and doubted that the content of online programs was of sufficient quality to promote student achievement. He watched as many schools adopted a blended approach, but to him they seemed to be using technology for technology's sake, and that turned him away. "For us, it's not about innovation," Altman said. "It's about effectiveness." After hearing Rocketship Education's co-founder, John Danner, talk about the transformative power of the blended model in the fall of 2010, Altman realized he could have both and soon launched an eight-month process to design and implement a blended learning model. *(See Appendix 2 – Blended Learning Project Plan)* By the end of that year, he had spoken with experts in the space and made several critical hires, including a Director of Blended

[5] Green opened under the CMO's leadership just 2 weeks before Hurricane Katrina hit; the school sustained some damage but reopened in January 2006.

[6] Green now serves students in grades K through 8; Dibert serves students in preK (four years of age) through 8.

[7] Clark had been the lowest performing non-alternative high school in the state in 2010-2011, the year prior to being taken over by FirstLine.

[8] FirstLine began control of Langston Hughes Academy through an agreement it reached in 2010 with NOLA 180, another New Orleans CMO.

[9] SRI International is currently engaged in an impact evaluation of FirstLine's blended learning model. The report, expected to be published in late 2012, will compare the performance between Arthur Ashe and local comparable, but non-blended, schools.

Learning, a Blended Learning Project Manager, and an outside consultant. Altman also decided that Arthur Ashe would be the first elementary school in the network to use blended learning because he thought that Ashe's 26% special education population, the largest percentage of special education students at any school in New Orleans, would benefit the most from the enhanced individualization blended learning could provide.

The three new hires began working as part of the project's newly appointed Core Blended Learning Project Team in January 2011, alongside Altman, Ashe Director Aqua Stovall, Ashe Middle School Principal Sabrina Pence,[10] and other administrators. Team members had to prioritize their days in order to support an early design process that necessitated multiple meetings each week. "It involved constant tinkering and a significant time commitment," said Chris Liang-Vergara, the Director of Blended Learning. "You have to have a clear mindset going in that versions 1 through 5 aren't enough. You have to push your innovation to get outside of your traditional school model."

By late February, the core team had arrived at a working model: the students would use self-paced online software in a computer lab twice a day, using time carved out of their extended Math and ELA instructional blocks.[11] Soon thereafter, FirstLine brought in the faculty to refine the model and to secure teacher support. An Extended Design Team included seven teachers who worked together to mold the early program design and study best practices at other blended learning schools. By April, the Extended Design Team began piloting software with their students, and by June the model was fully designed.

For students at Ashe, the majority of their day is similar to a traditional non-blended school day, as they attend teacher-led classes as part of an extended day schedule. Students begin their day with breakfast and then their Advisory class, which is both their homeroom and the class which focuses on character building and life skills. Students then rotate among blocks of time between English Language Arts (ELA), Math, Social Studies, Science, Physical Education, and Math/ELA Lab, which focuses on core skills, delivered via online programs, in these two subjects. *(See Figure on the following page for a depiction of the school schedule.)*

The real difference for Ashe students comes during the time they spend each day in the Computer Lab focusing on core ELA and Math skills. Students in grades K-3 spend approximately 60 minutes in the lab across the two subject areas while students in grades 4-8 spend as much as 100 minutes per day in the lab across two class periods. Those students who receive Tier II or III RTI and special education

[10] Pence and Stovall moved into new positions at the start of this past school year (2011-2012); they are now the Ashe School Director and FirstLine's Director of Student Support, respectively.

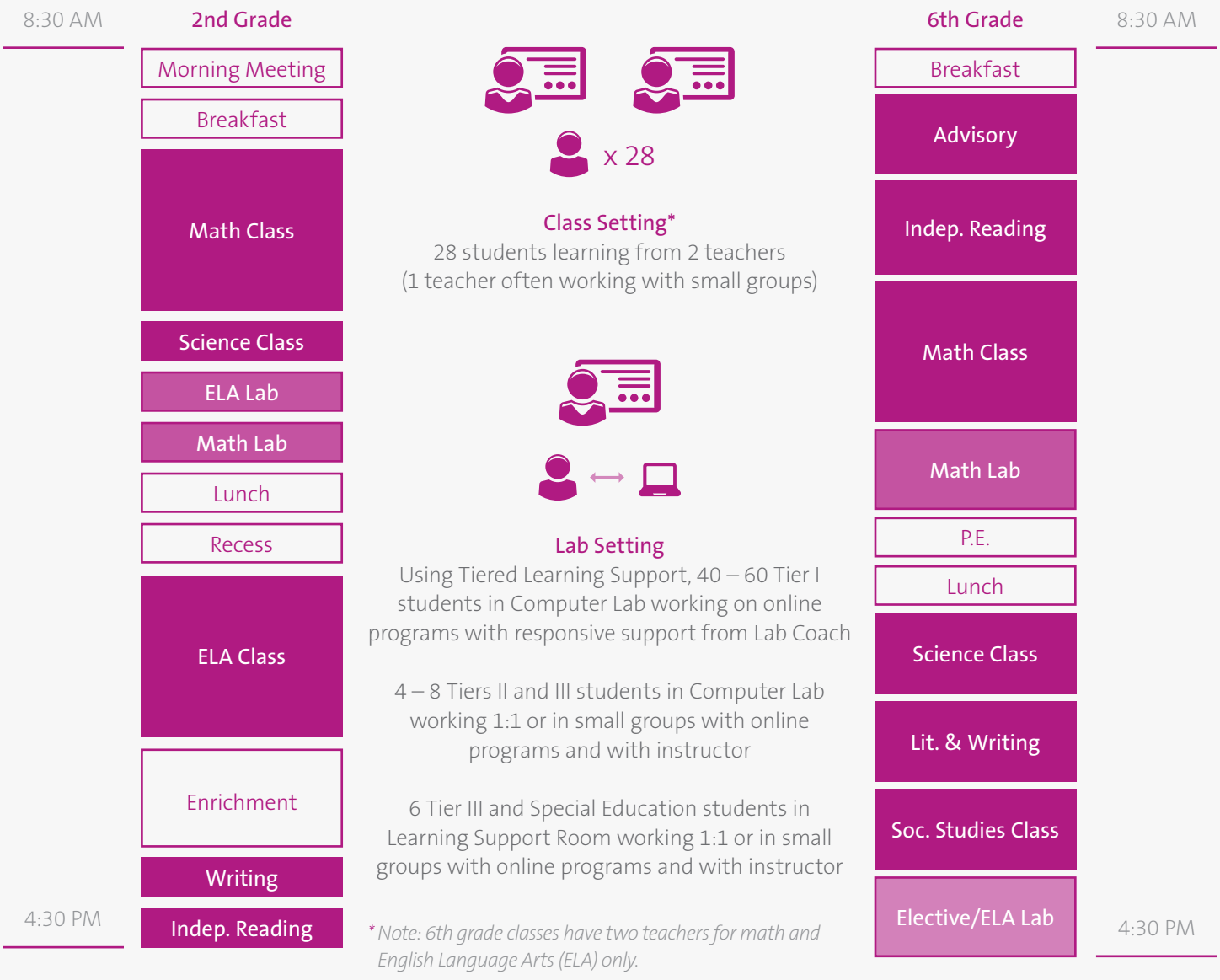
[11] The school had also considered a one-to-one laptop model but was deterred by the much higher upfront costs of that approach and the reliability concerns that it felt would accompany a wireless network.

services work with specially chosen online programs and/or in small groups with teachers during lab time. This tweak to the model – providing more direct support to students who need it – hints at the core of what FirstLine was looking for when building toward blended learning. It seeks to engage the students on an individualized basis through computer-based instruction and more responsive instructor support. Through this personalized support, it hopes to improve student achievement.

Fig. 1

A Day in the Life of a Student at Arthur Ashe Charter School

(See Appendix 6: Detailed School Schedule)



In order to implement the new model and strive for that goal of improved achievement, Ashe's leadership had to not just revamp the instructional dimension of the school; it had to consider the operational and financial implications of the model as well. The following sections of this case study explore in greater detail all three of these dimensions and the roles they played in supporting blended learning at Arthur Ashe.

Instructional Model

FirstLine Schools

Instructional Model

Blended learning is used at Arthur Ashe Charter School as a tool to help close the achievement gap through a more dedicated approach to individualizing instruction.

Instructional Quick Facts

BLENDED MODEL *Lab-rotation for Math and ELA, grades K-8*

PEDAGOGICAL APPROACH *A five-pronged approach, including:*

- *Standards mastery*
- *Well-structured lessons*
- *Classroom relationships, management, and leadership*
- *Growth mindset*
- *Rigor and relevance*

INSTRUCTIONAL TIME, K-3: *375 minutes: 315 minutes in classroom and 30 minutes of online learning time in Math and ELA*

INSTRUCTIONAL TIME, 4-8: *370 minutes: average of 295 minutes in classroom, 50 minutes of online learning time in Math, and 25 minutes of online learning time in ELA; Tier II, III and Special Education students receive an extra 50 minutes of online learning/intervention during Independent Reading time*

STUDENT TO ADULT RATIO: *Classrooms: 28 students, 1-2 certificated teachers; Computer Labs: up to 60 students, 1 non-certificated lab coach and 1-2 core teachers offering RTI support; Special education pull-outs: up to 6 students, 1 instructor*

INSTRUCTIONAL ROLES: *Teachers, lab coaches, and special education instructors; some classrooms also have assistant teachers called Partner Teachers*

This is made possible by the use of computer labs to provide adaptive Math and ELA educational content and by freeing up teachers to provide more individualized support for students during the school day. Altman sees this approach as an antidote to an inevitable shortcoming of the traditional system. "A single teacher cannot possibly personalize instruction for 30 students. It's impossible," he said. "But this does it." Customizing education for each student is the goal at Ashe, and online learning is just one more tool used to achieve it. The school also deploys an extended eight-hour day, extra time for Math and English instruction, a data-rich culture, and a closely monitored set of feedback loops to hit this target.

The feedback loops are based on a year-long system of assessments ranging from daily Exit Tickets, which students must complete upon leaving every class, to the annual state exams.[12] *(See Appendix 3 for more detail on Ashe's assessment system).* All assessments are used to inform instruction to some extent, and some play very specific roles. For example, diagnostic assessments given at the beginning of the year help to group students in each grade into different tiers. Tier I students are in the school's general education program, Tiers II and III receive different levels of intervention support, and,

[12] Students in 4th and 8th grade take the Louisiana Educational Assessment Program (LEAP), which determines whether they will be promoted or retained. Students in the 3rd, 5th, 6th, and 7th grades take the lower-stakes iLEAP test, which is designed to measure student progress but does not determine whether they will be promoted to the next grade or retained in the current grade.

while not called Tier IV, there is a fourth tier for those students receiving special education services. Throughout the year, students' placement into these tiers can be adjusted based on the results of subsequent assessments, decisions that are evaluated at bimonthly faculty meetings.

Each class at Ashe includes a mix of students across these tiers, and the students all stay with each other during the four core classes of ELA, Math, Science, and Social Studies. During the school's "computer-assisted instruction" time, the classes split up with the Tier I and II students going into the computer lab, and the Tier III and special education students going into the smaller Learning Support room. Whatever their destination, the students log in to Math and ELA programs which remember their individual skill levels and provide them with standards-based exercises meant to target gaps in knowledge or supplement classroom instruction. The instructional modality that all the students face is the same: their learning is driven by online programs, with responsive direct support from instructional staff. *(See "Support for Special Populations" and "Role of Online Instruction" for more detail.)*

Instructional Delivery:

Data-Driven Instruction and Online Learning Promote Increased Responsiveness to Student Needs

The importance of data in Ashe's instructional approach is apparent from the moment one sets foot inside the school: student performance charts are everywhere. The results of school-wide interim benchmarks are plastered along the corridors, next to weekly Math and ELA tracking sheets, which highlight the top students in each class. The same information is displayed within the classrooms, hung at student eye level. The computer labs, too, are decorated with signs displaying student performance data. Every student using ST Math, for example, is listed on a bar graph with the rest of his class which represents how far into the curriculum each student has progressed. "Data is huge here," said Caroline Duncan, one of many Ashe teachers who use student-response clickers during class time to gauge student understanding and gather more data. "Ashe is a very data-driven school."

Small Groups and Stations at Ashe

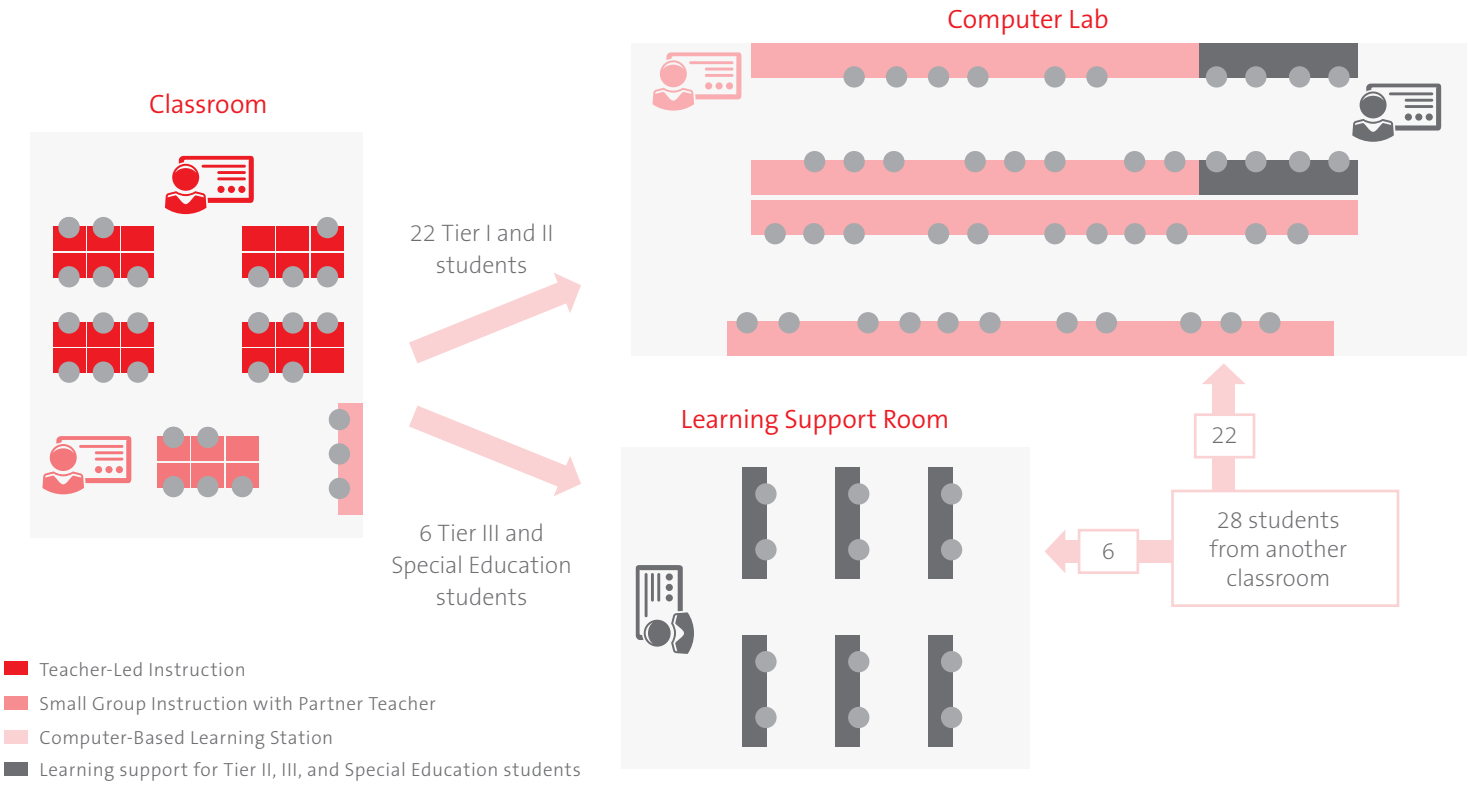
All Math and ELA classes at Ashe incorporate differentiated small group instruction. Grades K-4 have implemented a station approach and cycle students through whole group teaching, computer-based exercises, and small group support for targeted remediation. Grades 5-8 are also using this approach regularly in classes, but have not yet incorporated computer-based learning or stations to the same degree. All small group arrangements can change throughout the year, sometimes from week to week, and are primarily determined by the results of weekly multiple choice assessments. Each Friday teachers gather with others in their content area to analyze recent assessment data, consider causes for misconceptions evident in student responses, adjust assignments of students to flexible, same-level groupings, and brainstorm strategies for improving performance the following week.

An important way in which this data-driven atmosphere manifests itself is in the school's use of its quarterly interim benchmarks[13] to develop more targeted instructional delivery. The teachers actively prepare students for these exams. They then meet as a group during an in-service day (called a "Data Day") following each assessment, to evaluate the results and craft one-week re-teaching plans called "battle plans" to fill in gaps exposed by the benchmarks.

The potential for filling in knowledge gaps is one of the factors which drew FirstLine to blended learning. Pence and other school leaders see computer programs such as ST Math and SuccessMaker as being adept at first identifying these gaps, often through periodic assessments, and then targeting them with exercises tailored to the students' ability level. This, the school hopes, will allow students to address specific skill gaps during their 30- to 60-minute computer period, while learning with their peers during regular class time. For students

Fig. 2

Ashe Charter School's Blended Learning Model



[13] Students in grades 3-8 take English and Math assessments which have been created by the educational assessment company Achievement Network (A-Net); interim assessments for Science and Social Studies and assessments for students in grades 1-2 are created in-house.

at standard, the computer lab functions as a time for supplementing their understanding of current curricular topics (often using different, less remediation-based programs). For others still, the online software allows them to push ahead of the class curriculum. The intent is to individualize the instruction for all students. *(See "Role of Online Instruction" for more detail.)*

Supporting Special Populations: *Using Blended Learning to Reach Large Special Education and RTI Populations*
Ashe was originally chosen to be one of the first two schools in the network to launch the new model because FirstLine believed blended learning could better individualize instruction for the school's large special education and RTI population, who typically need more intensive differentiated support.[14] As a result, Ashe has restructured its model for supporting RTI Tier II and III students, as well as special education students, by leveraging the computer lab scheduling block to eliminate the practice of pulling students out of core classes to receive support.

- Response to Intervention Tier II Students
  Tier II RTI students sit alongside their Tier I peers in the computer lab but often use different programs geared to intervention and to meeting them at their level. Ashe further individualizes their instruction by providing direct support to these students in the form of RTI instruction from core Math and ELA teachers.[15] These teachers create a detailed plan for each lab period based on data from previous lab sessions; the plan includes a list of students to be supported and a list of the online exercises that the students have struggled with. Teachers then take this RTI plan into the lab and work, one-on-one or in small groups, with each student on their list (typically between 4-8 students per lab period). Sitting next to the students, they will call up each exercise the students are struggling with and then act out an *I Do, We Do, You Do* interplay: They will show the students how to do the problem, then work with the students on similar problems, and then stand back and watch the students do the work on their own.

- Response to Intervention Tier III and Special Education Students Tier III RTI and special education students also work on computer programs during this time but meet in groups of up to 12 in a separate classroom across the hall from the computer lab.[16] There they work

[14] Approximately 26% of Ashe's students receive Special Education services and 43% are classified as Tier II or Tier III in RTI. Ashe uses a range of assessments, including DIBELS, Fountas & Pinell, state tests, and online assessments, to identify students in need of special education services and interim benchmark assessment results and other student performance data to place students into RTI tiers for Math and ELA. Students' placement into RTI tiers is adjusted every eight to ten weeks based on the results of the bimonthly interim benchmarks.

[15] This marks a change from 2010-11 when Ashe used separate RTI instructors, and not the core teachers, to offer RTI support.

[16] In crafting its model, Ashe tried to make sure it took advantage of all possible efficiency gains. Having 12 Tier III and special education students meet at one time in the Learning Support room is an example of such a measure. The resource specialist in this room only meets with up to six students at a time, while the other students in the room work online. Having 12 in the room at once eliminates the passing time that would be required if the specialist brought the first six students to the computer lab and brought six others back.

independently on laptops on intervention-based online programs such as Ticket to Read, and in small groups under the supervision of a special education instructor. These instructors work with up to six students at one time and are responsible for identifying and planning for on- and off-line instruction to support these students' needs and ensure that they make progress in this specialized setting.

Note that Ashe actively monitors its approach to teaching those students in need of learning support and will change tactics for certain students, using different programs or different instructors, if growth is not achieved. *(Please see Appendix 3 for a graphic used by the school to depict this facet of the model).*

Learning Support, *Not* Response to Intervention

Response to Intervention at Ashe is not called by that name. It is called Learning Support, so as to emphasize that it is a positive, supportive feature of the school, not one with a negative stigma attached. What's more, it is intended for all students who need extra help, not just those in the lowest cohorts. As Pence says, "We feel like all of our students have an IEP."

Role of Online Instruction:

Online Programs Foster Increased Individualization

Even with their school's data-driven approach, Ashe teachers still face the challenge of adapting Math and ELA instruction to the individual needs of each student every day. The time students spend in the computer lab is designed to support teachers in pursuing this goal. More specifically, the lab period is intended to accomplish two academic objectives, both tied to student-specific needs:

1. Back-filling gaps in students' prior subject knowledge

2. Supplementing in-class instruction with additional material aligned to state and Common Core standards

The computer-based learning time does not free up teachers from having to teach to these same standards, though some have said it has created more time for emphasizing creative thinking skills. Instead, it reinforces these standards, lifting up all students to where they need to be not just in class, but in their overall Math and ELA skills progression. For example, it is not uncommon at Ashe for a sixth-grader to be working on fourth-grade material to address a particular skill gap.

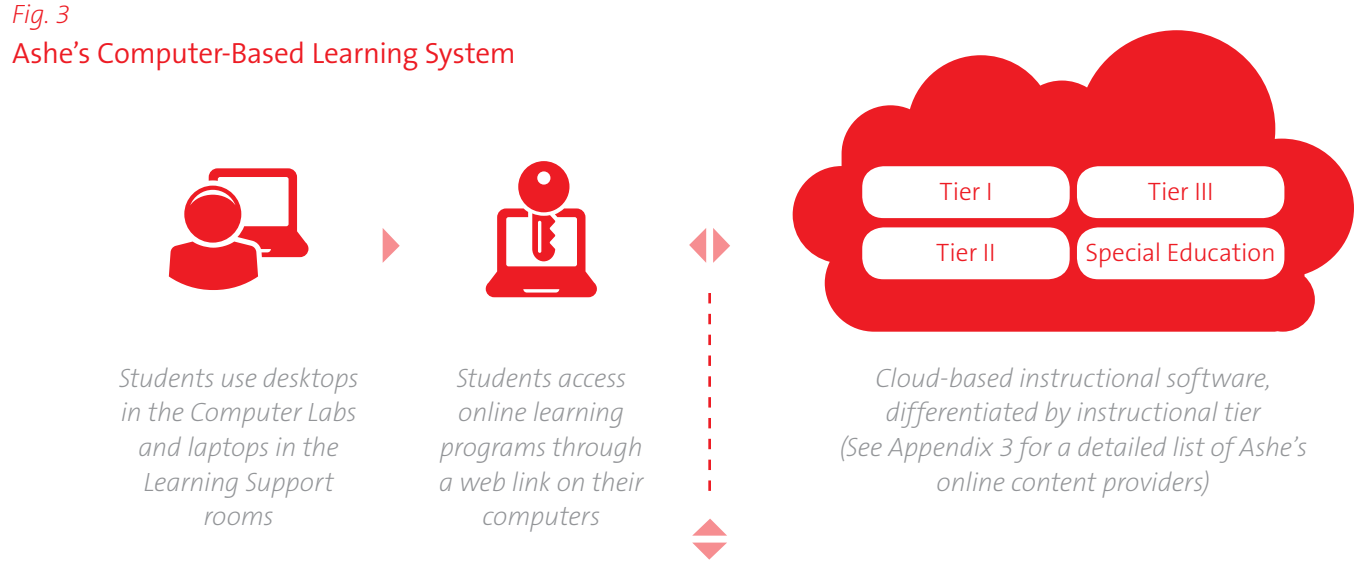
The digital content programs are largely self-paced and many include their own assessments to determine when a student is ready to move on to the next lesson. The programs often follow a linear path through their curriculum, but the more sophisticated ones allow teachers to rearrange this path, more closely aligning students' online experience with the scope and sequence used at Ashe, with Louisiana state standards, or with the students' own needs.

A Lesson in Online Program Overload

Ashe piloted 20 programs before implementing its blended model and began the year using 14. Looking back, Liang-Vergara regards that as too ambitious for Year 1. "You definitely need multiple programs to properly cover the range of skill levels; there's no way one provider will meet all your needs. However, we learned to focus on depth rather than breadth. We had software for grammar, confused words, reading comprehension, and test prep for our middle school ELA classes. It was a resource overload. We evolved to only focusing on two areas to increase the fidelity of use." He added that it may have also been ambitious to launch the model with multiple programs at the same time, instead of phasing them in over the course of several weeks or months. This was another lesson that Ashe learned along the way. *(See Appendix 3 for the range of content providers being used at Ashe, and see "Lessons Learned" for more key learnings that Ashe faced during the first year of implementation.)*

Fig. 3

Ashe's Computer-Based Learning System



Ashe's teachers can assign different programs and content to different students based on their abilities and particular instructional needs, though this more student-specific approach has not yet been implemented consistently across the school. For the most part, the lab assignments are driven by the lab coach, who alerts students when they come into the room as to which programs they will be working on that day. Students then choose their assigned programs from a menu-like interface that they click into from their desktops. On a given day, a second-grade student may continue working on her vocabulary skills using the iStation program, a sixth-grader may work on a fourth-grade reading level SuccessMaker exercise, and an eighth-grader may take the next step in his journey through the ST Math curriculum. Student experiences vary by design, as the lab is intended to be a time when students work at their own pace and on exercises necessary to support their success in class.

Role of the Instructors:

Lab Coaches and Partner Teachers Play Significant Roles

The role of the instructors changed at Ashe this past year with the adoption of subject-specific teaching assignments for grades 1-3, the implementation of blended learning, and the introduction of new roles. Whereas in previous years, grades 1-3 classroom teachers would teach all subjects to their students, these teachers now specialize in particular subjects such as Math or ELA for multiple groups of students over the course of the day. Traditional classroom activities for the teachers have been largely unchanged by blended learning, although the small-group, station-rotation approach discussed earlier evolved more rapidly this past year. The changes brought on by the new model have been more significant beyond the classroom: The teachers now play the role of the RTI instructor during computer lab periods, and they have a wealth of formative data from the software to inform their instruction and remediation.

The unique instructional roles at Ashe, and where the differences between this school and a traditional school are most profound, are the school's Lab Coaches and Partner Teachers. The first is more a product of blended learning than the second, but both serve a role in the school's more pronounced desire to individualize instruction.

- Lab Coaches: Ashe's two lab coaches[17] supervise the school's two computer labs, overseeing 40 to 60 students at any one time. They tell the students which programs to log in to when they arrive and what brief computer-based drills to work on for their Exit Tickets at the end of the period. They also track the students' performance against self-selected weekly goals and issue the students' Pass/Fail lab period report card grades, based on their performance against the school-designated goals. In short, the online programs take care of the instruction during the lab period, and the coaches take care of the rest, including classroom management, data tracking, grading, tutoring (on an as-needed basis), and

[17] They are non-certificated instructors.

minor program troubleshooting when technical problems arise. The coaches are a primary reason why Liang-Vergara often says of the model that "the software is not the key player." The model would not have been able to happen without the coaches.

- **Partner Teachers:** All K-2 classes have two full-time teachers and all 3-8 Math and ELA classes have two full-time teachers, including one called a "partner teacher." These partner teachers often provide targeted support to small groups of students during classroom periods and are assigned to one or more classes per day based on class needs and teacher specialties (e.g., ELA teachers are often partnered with other ELA teachers; special education teachers are often assigned to classes with high remediation needs). Typically the school uses this approach to co-teaching to develop and provide modified versions of the core curriculum, resulting in faster- or slower-paced versions of core lessons given to evolving groups of students based on needs identified in weekly assessments. For example, the six students with the lowest scores on last week's quiz might work with the partner teacher on a modified version of this week's lesson that incorporates more spiraled review and checks for understanding of new content. Alternately, if most students are successful on an assessment, then the highest group may be pulled for a parallel lesson with the partner teacher the following week that includes more exploratory learning.

Student Ownership*

The goal of Ashe's blended learning model is to close the achievement gap for its students, and according to staff at all levels, one of the core objectives beneath that overarching mission is to foster an increased sense of student ownership of their education. Indeed, Jay Altman and others believe that increased student ownership could be a necessary step toward increased performance. The school attempts to foster student ownership in two key ways: engagement and accountability.

- **Student engagement:** According to staff, it is not uncommon to observe a lab period and see that most of the students are locked into their programs. They are engaged by the graphically rich material they see on their screens, though some programs, particularly many of the more game-based Math programs, seem to do a better job of attracting the students than others. The staff ratchets up this spirit of engagement by posting class-wide performance data at the front of the room to bolster a sense of competition among students, and by periodically asking students how far along they are in their online curriculum. Those students who proceed all the

* Note that perceptions of student engagement are based on faculty observations and informal student feedback as opposed to formally-collected data.

way through a year's worth of online content†, something that happened several times this past year, are celebrated; teachers indicate that these instances have spurred other students to engage more deeply. Lastly, Ashe uses "Free Choice Fridays" to put a fun, student-empowering twist on the content selection. If they have behaved and have already hit their weekly school-determined goals, then the students can choose their own content, from the school's list of software providers.

- **Student accountability:** The school has set goals for each of the core programs at use in the lab and posts these goals conspicuously around the room. For example, all fifth-grade students might need to complete 20 SuccessMaker problems for every 30 minutes spent working in the program in the ELA lab and progress another 3% through the ST Math curriculum in the Math lab. The students must set similar, though often more ambitious, goals for themselves each week, too,‡ and they are held accountable for creating these goals and then tracking their performance against them. In interviews, school leaders and lab coaches have pointed to this ongoing emphasis on goal-setting and tracking as bring critical to lab management and to keeping students on track.

† Many of the programs, like ST Math, are presented as a year's worth of curriculum (e.g., 5th-grade Math).

‡ Examples of student-chosen goals might include completing 25 problems for every 30 minutes in SuccessMaker, or progressing through 5% of the ST Math curriculum.

Operational Model

FirstLine Schools

Operational Model

Jay Altman's blended learning epiphany, through which he saw the value in a blended approach, set into motion a number of operational decisions. Some of these decisions, such as the school's use of human capital and hardware, its system for data integration, and the way in which the CMO would provide support, have played a central role in the design and implementation of the model. They are profiled below in more detail.

Human Capital:

Blended Learning Led to the Creation of New Roles and the Elimination of Others

Ashe's blended model relies heavily on the lab coaches, positions the school had not needed with its previous, more traditional model. Their role is critical, not just because they oversee the computer labs and work directly with the students there, but because they allow teachers to take on the role of RTI instructor. The staff has pointed to the lab coaches' ability to manage the computer room as one of the main reasons why, from their perspective, the implementation of the model has gone smoothly. The teachers, of course, have been important as well.

There are 32 teachers at Ashe, and while few are in their first year of teaching, all are still in their first ten years in the profession, and many have not yet hit the five-year mark. About half come from Teach for America or Teach NOLA, a similar organization. According to Altman, it is common for the entire teaching staff to work 50-plus hours per week with some teachers often working more than 60. This workload is, on average, no more substantial than it was before blended learning. To be sure, more work was required early on last year, as the teaching staff grew accustomed to the new model, but Pence and Altman believe that over time the model has made the teachers more effective and efficient, and may have saved some time as well. "Many teachers would have previously pulled students at lunch or after school for remediation," said Pence, "but they did not need to do this this past year because of the time built into the day for remediation."

To help measure how effective the teachers are with their time, FirstLine has instituted a pay-for-performance bonus system at Ashe,[18] in which the staff can receive a bonus that is 50 percent based on

[18] A regular teacher salary scale sits beneath this bonus structure.

state assessment scores and 50 percent on teacher evaluations.

This incentive pay system was new last year, but the teachers' job at Ashe is much the same as it was before blended learning, though the option of monitoring the back-and-forth data stream and, particularly, the role of supporting direct RTI instruction are new wrinkles to the job.

The RTI role is a direct result of one of the integral operational decisions imbedded in the Ashe model: the school cut the size of its learning support staff from 14 to 7 (the cuts primarily consisted of intervention instructors). CMO leaders made this decision as a cost-cutting move, to help cut into a $2,148-per-student operating deficit that Ashe faced in 2010-11 *(see Financial Model section for more detail)*. This was also a response to what they hoped would be one of the core strengths of the model: If the computer-based approach worked in individualizing instruction then students, even those needing the most targeted support, would not lose anything. The corresponding tradeoffs to this decision have been twofold: the number of students being pulled out for special education or Tier III support has doubled from 6 to 12 per class period (though the student:instructor ratio in these working groups has stayed the same at 6:1), and the teachers now handle their own RTI. This second point is something Altman and other school leaders have indicated as a hidden benefit of the model, the logic being that the teachers know their students best, and the students receiving intervention should respond well to the teachers they see every day.

A Year of Change at Ashe Illustrates the Adaptability of the Teachers

Ashe Director Sabrina Pence has pointed to the adaptability of her teaching staff as one of the main enabling factors behind the school's blended model, but in doing so she is not just referring to the way they have adapted to blended learning. There were three other big changes at Ashe this past year (2011-12):

- **Subject-specific teaching:** Implemented in grades 1-3,* subject-specific teaching should, according to Pence, enable the teachers at Ashe to hone their craft at a faster rate: They will now teach the same or a similar lesson two or more times a day rather than once.
- **An extended school year calendar:** Starting this past year, Ashe students now have five one- to two-weeks breaks during the year and have seven weeks off in the summer. The hope for the extended calendar is that it will make the pace of the teachers' job more sustainable and will guard against summer learning loss.
- **Increased enrollment:** The Ashe student body size grew by about a third from 2010-11 to 2011-12 (enrollment rose from 323 to 422) due to increased recruitment efforts and added class sections in kindergarten and fifth grade. The number of teachers, however, stayed constant at 32. Consequently, the average class size increased, though only slightly (from 26 to 28 students).

** Subject-specific teaching had already existed in grades 4-8 before the 2011-12 school year.*

Role of the CMO:

The Home Office Has Provided Critical Support while Allowing for Flexibility

FirstLine views blended learning as a network-wide initiative rather than a school-based project and has made important operational decisions to reinforce this point. The two schools using the model are not asked to manage the blended learning project on their own, and, in fact, are asked to do relatively little above the important day-to-day instructional and data management tasks they face. As mentioned earlier, one of the first steps Altman made in his journey to blended learning was the hiring of three critical positions: a Director of Blended Learning, Chris Liang-Vergara; a Blended Learning Project Manager, Sia Karamalegos;[19] and an outside consultant, Justin Su.[20]

All three of them have proven quite valuable to the schools. Liang-Vergara, in particular, did a number of things which eased the implementation burden on Ashe and Clark (the other blended learning school last year). He researched software and blended school models and led the design process. He negotiated with the software vendors and acquired the online content.[21] He organized weekly faculty meetings early in the year to address concerns with the model and has been on call for any problems which have arisen with the technology. According to Pence, this kind of CMO-level support has been instrumental to the success of the model.

Keeping Lines of Communication Open to Continually Shape the Model

The staff and leadership at Ashe proactively addressed the challenges brought on by blended learning throughout the first year of implementation. Every Wednesday morning during the school year, Pence held a blended learning meeting where staff came together to talk about the model and how it could be improved. Similarly, for the first three months of the school year Liang-Vergara held weekly meetings on Tuesdays and Thursdays with the Math and English teachers, respectively, to talk about the finer points of the model, including the accessibility of the data, the quality of the software, and the capacity for greater individualization. One of the outcomes of the Wednesday morning meetings was the decision to narrow the range of programs from 20 to 14. Another was an adjustment to the K-3 lab schedule so that the students only come to the lab once a day for an hour (with back-to-back half-hours of Math and ELA) instead of twice for 30 minutes each. This means less teacher time is taken delivering students to and from a lab period and allows them to make the most of every minute they have for instruction.

[19] Karamalegos has since been promoted to the position of Director of Data Management; Jeff Ellerbach now fills the role of Blended Learning Project Manager.

[20] Su had been the Director of Technology at Rocketship Education in San Jose, another CMO profiled in these case studies. He was brought on to introduce FirstLine to how blended learning works in practice and to shape the early design of the model.

[21] The CMO purchased the relevant software licenses this past year, with the understanding that the schools would assume this cost starting in Year 2.

While the CMO has been decidedly hands-on in its support for Ashe's blended learning implementation, it has been hands-off in its approach to many other aspects of the school's management. Essentially, Altman and his executive team treat each of the five FirstLine schools with steady oversight but plenty of individualization and discretion. They want each school to own and manage the education that takes place within its walls.

Data Integration:

The Lab-Classroom Data Flow Is Non-Existent but Feedback Loops Are Used Heavily Elsewhere

To date, FirstLine has elected not to take advantage of the potential feedback loop between the computer lab and the classroom. The Core Design Team made this decision in order to ease the burden on the teachers and to give the school time to understand how it could best use the data coming from the online programs to inform instruction in the classroom. Some teachers are accessing the data to see how their students are doing, but this approach has not been standardized across the school and it is not yet informing classroom instruction at any level. Similarly, the students' classroom work is not informing their lab time either, aside from the assessment-based placements into different instructional tiers. There is little interplay between the teachers and the lab coaches, between the classrooms and the labs, though the school is considering a change to this in the current school year.

There is, however, a clear interplay between the teachers and the lab when it comes to RTI instruction. Although the relevant data points still are not being carried from one modality of instruction (the lab) to another (the classroom), the school's RTI approach is highly dependent on the use of data. In this case, the RTI data flow is running from the lab to the teachers in their role as RTI instructors and back to the lab, where the teachers work with the students in a highly targeted way. Every Wednesday, teachers pull data from the Tier II students' online work and create the RTI plan mentioned before, in which they list the students most in need of intervention and the exact problems that gave them difficulty.

Data integration at Ashe might not be a two-way street between the classrooms and the labs, but it is happening in a powerful, actionable way in the labs alone, due to the feedback loop between the computers and the coaches, and between the laptops and the special education instructors.[22] The coaches and special education instructors are responsible for monitoring the students' online work and relying on the data there to help the students accelerate through the programs, to slow them down when they are moving too quickly, and to redirect them to new programs or new material when the need arises. As a testament to their importance in the model, these coaches and resource specialists compile all the online data from multiple programs, and the students' performance

[22] As mentioned in the "Instructional Model," data are also used to inform small-group or parallel lesson instruction in the classroom using Partner Teachers. This approach does not rely on lab data.

against weekly goals, and the results of the students' computer lab exit tickets, and synthesize all of it into not just the makings of the students' computer lab grades but also a plan of attack for the students in their upcoming lab sessions.

Hardware Requirements:

Ashe Rehabbed and Wired Its Labs, and Then Filled Them with Computers

Liang-Vergara has said that one factor which dissuaded the FirstLine team from using a one-to-one laptop model, potentially in a station-rotation approach, is the total cost of the laptops involved. This in part led to choosing the lab-rotation approach, where the total hardware purchasing needs are more modest. The need for hardware is still there, of course, and is present in the school's use of computers and the underlying infrastructure supporting the model.

- **Computers:** Ashe uses 117 newly purchased desktop PCs across its two computer rooms. The PCs are no bigger than a lunchbox and are accompanied by flat-screen monitors, features which cut down on the computers' total footprint in each lab. Each classroom also has 2-5 computers that were there before the implementation of the blended model (some teachers use these as part of the small group station approach described before). Ashe also uses 45 laptops in its Learning Support room, for the Tier III and special education students.
- **Infrastructure:** Fortunately for Ashe, the physical space for the computer labs was not an issue, although as a school converting from a more traditional school design, some major work needed to be done. The school converted an existing library and a double-sized classroom into the two computer labs. This process did not involve knocking down any walls, but it did require fitting the rooms for the technology, and that was difficult. The school paid for an electrician to set up the rooms' wiring, and it needed to build up the wireless network, increase bandwidth, and add access points – all important elements that the school added to early on in this early on in this past school year.

Financial Model

FirstLine Schools

Financial Model

Based on one-time costs as well as ongoing costs and savings, Ashe expects to become sustainable on public revenues by Year 3.

Altman's primary reason for pursuing blended learning was the model's potential for deeper individualization and improved student outcomes. However, he has made it clear that his secondary motivation was to improve the schools' and, by extension, the network's financial picture. His schools were faced with a persistent $1,000-per-student funding gap,[23] something that had been previously filled via philanthropy.

Financial Impact of Blended Learning
per pupil

FINANCIAL BENEFIT

+ $829 *Seven fewer support staff personnel*

ADDED COST

- $188 *Lab Staff and IT Intern*
- $266 *Software Licenses*
- $97 *Desktops and Laptops*
- $14 *Books and Furniture*

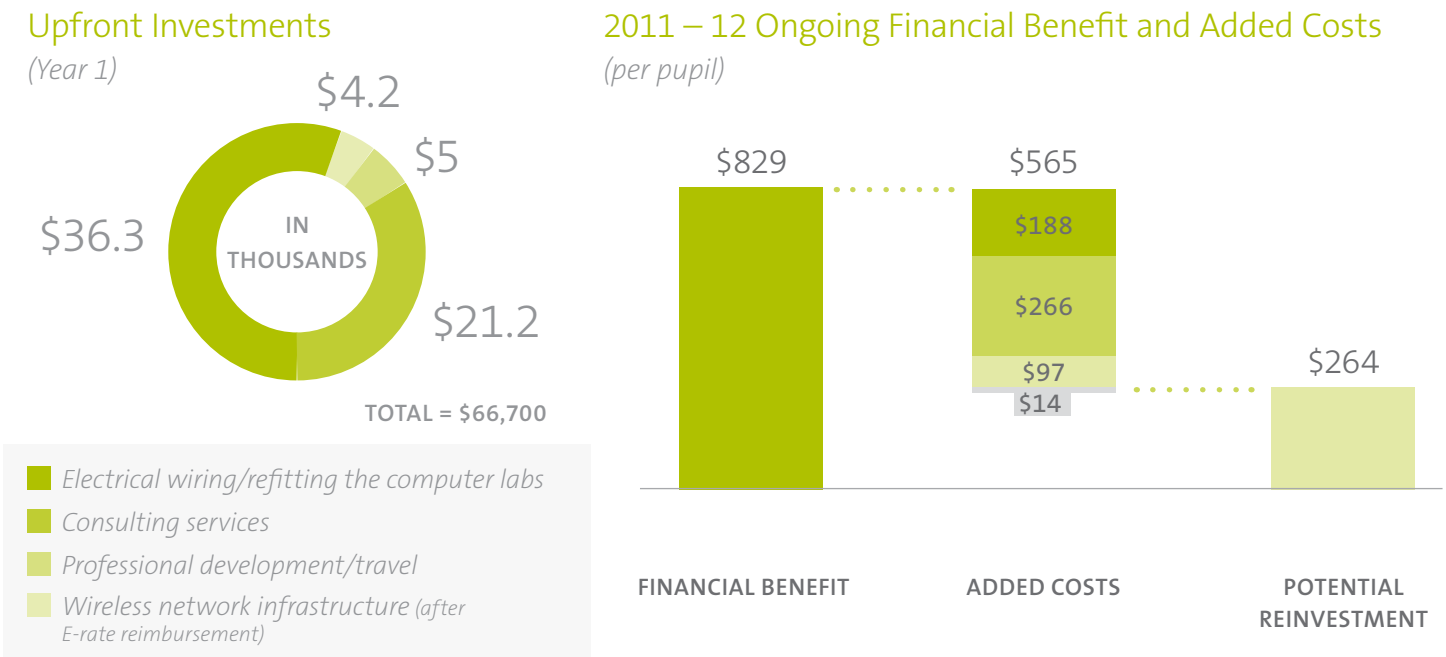
POTENTIAL REINVESTMENT

= $264 *Net per pupil savings, 2011-2012*

Does not include upfront investments

Fig. 4

Financial Reallocations from Ashe's Blended Model *(Amortized, per pupil basis)*



[23] The total amount of federal, state, and local revenue per child was $1,000 less than the total expenses per child, across the network; this difference was greater at Ashe which faced a per pupil deficit of $2,148. Ashe made up for this gap through philanthropy and a positive CMO fund balance.

Blended learning, then, is viewed as a key component of the CMO's financial sustainability plan. The hope is that what it does for sustainability at Ashe[24] can be replicated at the other FirstLine schools, ensuring sustainability for the network.

As of now, FirstLine does not expect Ashe to reach sustainability until Year 3 of the model (2013-14), although some financial gains are already being seen. As shown in Figure 4 on the previous page, the ongoing savings attributed to blended learning should exceed the ongoing costs.[25] Like at other blended learning schools, the savings and costs associated with Ashe's design should not be treated independently but collectively, as a reallocation of resources brought on by the new model. Figure 4 illustrates this reallocation of resources, suggesting a positive difference at the end of Year 1 which could be used to cut into the per pupil deficit mentioned above.

Upfront Investments in Blended Learning

The only significant non-recurring costs incurred by FirstLine in launching blended learning have been the following:

- $36,300 – Necessary electrical work to refit the previously existing library and classroom to accommodate computer labs
- $21,200 – Consulting fees paid to Justin Su and two other short-term consultants near the beginning of 2011 to help shape the early design of the model
- $5,000 – Professional development and travel (the latter was incurred when staff visited other blended learning schools)
- $4,158 – Wireless networking infrastructure costs, including access points and wireless controllers (after the school's E-Rate reimbursement)

Fig. 5

Ongoing Costs of Ashe's Blended Model

Budget Item	Cost Per Student 422 Students
Lab Coaches	$180
IT Intern	$8
Software	$266
Desktops, Laptops, and Related Hardware	$97
Books (for independent reading during lab time)	$7
Furniture	$7
TOTAL	**$565**

Note that FirstLine staffs two CMO-level positions directly involved in the development and management of the blended learning model (a Director of Blended Learning and a Blended Learning Project Manager). In Year 1, these positions represented a total cost of $191,000. Altman indicates that approximately 40 percent of their time was spent on the model at Ashe but expects this percentage to drop in upcoming years as more of their time is spent on the implementation of blended learning at other FirstLine schools. These expenses are not reflected in the charts here as they are borne by the network and not by the school.

[24] Sustainability is defined here as the school's ability to operate without a deficit off of public revenue alone.

[25] As reflected in the chart in Figure 4, there was a positive Year 1 difference between the savings and costs of blended learning, but this pertains only to the ongoing savings and costs and not the upfront investments required. Those expenses and other elements of Ashe's cost structure will keep the school from achieving sustainability until Year 3.

Ongoing Additional Costs Due to Blended Learning

The majority of the costs related to the introduction of blended learning at Ashe are recurring expenses. These range from human capital costs to software licensing fees to hardware and furniture expenses. Many of the expenses in the last of those three categories will be reflected on FirstLine's financial statements as depreciation expenses. The table on the previous page lists these ongoing costs. Note that they are shown as per pupil costs (based on Ashe's enrollment of 422 students) and when applicable reflect the yearly depreciation or amortized cost. Staff-related costs include both salaries and benefits.

Ongoing Financial Benefit Due to Blended Learning

Ashe's school enrollment increased by 99 students this past year, but the school cut its learning support staff in half, from 14 to 7.[26] This is where the model generates the cost savings which Altman hopes will lead to sustainability down the road. Each of these staff members represents an average total cost, with benefits, of $48,709, meaning the school has saved roughly $350,000 in making this cut to staffing.

As of now, the difference between the ongoing costs and savings of Ashe's blended learning project, not including the upfront expenses, amounts to a net savings per student of $264. However, Altman and others point to two factors which, they hope, will lead to even larger financial gains in the future:

1. A drop in software license expenses: The CMO paid roughly $112,000 for software licenses this past year for Ashe alone, an amount that school leaders expect will drop significantly in subsequent years. As Pence has pointed out the school is already using fewer programs than it originally contracted for; this alone will bring the total cost of the software down. In addition, Altman projects that the cost of software, across the market, will decrease as the digital learning market matures and schools become "smarter about demand," as he says.

2. A rise in student enrollment: Ashe recently moved into a new building for the current school year, with capacity for up to 540 students. Pence does not expect to accommodate that many this year, though the school could grow to that number over time. She does expect, however, that Ashe will have as many as 500 students, which should lead to a drop, per pupil, in the school-wide costs mentioned above (e.g., Lab Coaches, books, some software license fees, etc.).

Incorporating these factors into a forward-looking financial model for the school, Altman and his finance team expect that Ashe should hit sustainability, not showing an operating deficit and relying solely on public revenue, by Year 3 of the model. *(See Appendix 9 for more detail on FirstLine's financial projections).*

[26] Only four of these positions were actually cut. Ashe had 11 of these positions in 2010-2011 and a student body size of 323; with an enrollment in 2011-2012 of 422, the school would have needed 14 instructors in those roles to maintain the same student-to-support staff ratio.

Lessons Learned

FirstLine Schools

Lessons Learned

Several of Ashe's teachers, coaches, and administrators have reported in interviews that they are pleased, and even excited, by the school's blended learning model to date. They are also open to acknowledging the challenges that they have faced along the way, particularly during the first month of implementation when a rash of technological issues[27] and a steeper-than-expected learning curve slowed down their progress.

Success Factors for Blended Learning at Arthur Ashe

Many of the instructional, operational, and financial elements mentioned in the preceding sections have positively influenced the design and implementation of Ashe's blended model. CMO- and school-level staff, however, have pointed to the following factors as the ones which were most significant in promoting a smooth implementation of the model.

1. An achievement-focused school culture

   Altman hopes that blended learning will help to narrow the achievement gap faced by his students, but he readily acknowledges that any potential impact made by blended learning will pale in comparison with the effect of the school culture at Ashe. "I think of culture as a multiplier effect," he said. "The culture has had the biggest impact, in terms of kids being focused, or kids having intellectual perseverance when a problem gets challenging." According to faculty, the Ashe culture espouses accountability, perseverance, and integrity, and suggests to students that they need to take ownership of their education.[28] It was important, then, to make sure the culture in the lab supported and reflected the overall school culture. To that end, Pence and other school leaders put forth a concerted effort to monitor the lab culture, even using a rubric everyday to gauge how well the lab coaches were instilling the Ashe culture and promoting the level of student goal-setting that is now the norm in the school's labs. *(Please see Appendix 3 for a sample lab culture rubric.)*

2. A carefully crafted change management plan

   As a school converting to a blended learning model, Ashe had to go through a change management process that, Altman says, could have determined the success or failure of the model. The process began when the Core Design Team persuaded the teaching staff that switching to blended learning was the right move for the school, even during a year when other major changes were taking place around them. The team's masterstroke, it seems, was in getting the faculty to accept that blended

[27] The major technological challenges were computer freeze-outs, inadequate bandwidth, and insufficient website filtering.

[28] This project did not seek to quantify the impact of the school culture, but it was often cited in school interviews as having a profound influence at the school.

learning could work for their students by first convincing them of something else: "We had to convince them that there was a problem," said Altman. "Like any change management plan, we had to define the problem first." That problem was both academic and financial. Ashe was not doing the best it could to drive student achievement because it was not able to be as responsive to student needs as it hoped to be. In fact, it posted back-to-back years of low-level absolute growth. Further, the school's public funding deficit amounted to more than $2,000 per student, due in large part to the extra layers of learning support which Ashe incorporated, beyond what the state paid for, to accommodate its large special education population. Once teachers absorbed the depth of the problem, it made it easier to persuade them to adopt a new approach to teaching.

The Core Design Team's next important move within the change management plan was to bring the faculty to the table, letting the teachers share in designing the model and in testing the software. The shift to blended learning was not intended to be a top-down decision, but rather one which would be formed from the bottom up. This helped to ensure buy-in for the model, and once that was in place the change management process became much easier.

3. A dedicated Core Blended Learning Project Team

More than 18 months have passed since FirstLine began its journey toward blended learning, but the work during the first two months of that journey is still held up by staff as profoundly important to the future of the model. The team that was involved was critically important and represented a number of integral responsibilities:

a. Altman led the initial push toward a blended model, brought in the necessary personnel, oversaw the initial workstream designs, and examined the financial impact of the model

b. Liang-Vergara traveled to multiple blended learning schools across the country, vetted more than 100 different content providers, and explored the various challenges and requirements associated with hardware and data management

c. Sia Karamalegos, the Blended Learning Project Manager, handled the logistics needed to implement the model and orchestrated the myriad moving pieces and attendant details involved with the early design process

d. Pence planned for the implementation of the model (including drafting multiple class schedules to fit the model into the day) and thought through the cultural impact of the new approach, both with teachers and with students

e. Aqua Stovall, then the Ashe Director, planned the special education and RTI components of the model, including the selection of the intervention-based programs and the design of the pull-out lab feature through which the school accommodates these students

Lessons Learned for Blended Learning at Arthur Ashe

As noted above, Ashe has faced a number of challenges in implementing blended learning, especially early on. These challenges and the steps the school took to mitigate them now represent learning points in the school's path to a smoother implementation of the model.

1. **Computer freeze-outs disrupted Computer Lab time.** Due to bandwidth issues and program-specific problems, the school has seen many of its computers freeze while in use. This was much more common early on last year, when occasionally more than half of the computers would freeze at a time.[29] To address this problem, Ashe added bandwidth, improved the technology infrastructure, and upgraded its filtering software (to block students from going to bandwidth-heavy websites such as YouTube). The CMO also paid for two IT interns through an Americorps program called TeachUp! At the beginning of this past school year, 100% of the interns' time was spent fixing computer issues in the labs; by the end of the year only one remained at Ashe and spent only 25% of his time in the labs.[30]

2. **The amount and variety of data coming from the online programs was a burden to teachers.** Part of the value of the online programs is that they present a great deal of data on the students, but according to Altman, "It's like drinking from a fire hose." Many teachers have admitted that the data from these programs can be hard to interpret and/or synthesize. The latter has been a particular concern because different programs report different forms of student achievement data (e.g., percent of syllabus complete vs. percent of standards complete, points for mastery vs. points for effort, etc.), and teachers have been left needing to understand multiple systems. This has been offset in part by "Data Cheat Sheets," which Liang-Vergara created for the faculty and in part by the aforementioned weekly blended learning meetings early in the year when teachers could talk about ways in which they can best handle the data. The fact that teachers are only asked to focus on RTI data, often using no more than one program for this, has also been helpful.

[29] The school found that one program, SuccessMaker, froze across the room any time a class logged in at the same time; the program could not handle the load from these multiple log-ins. Ashe has since staggered the log-in process for this program.

[30] Ashe paid $3,500 for each of the interns. The other intern ended the school year working at Clark High School, helping with that school's ninth-grade implementation of blended learning.

3. **Ensuring a consistent good-faith student effort has been difficult.** Some students tried to game the online programs by purposely underperforming on diagnostics in order to receive easier exercises. Some have used a "guess and check" approach to the online work or have simply shown little effort, particularly when faced with multiple choice problems. This was more of a challenge earlier in this past school year and was addressed in part by the school's decision to elevate each lab period to its own Pass/Fail report card grade as part of an emphasis to the students that their computer work counts. Similarly, the school added a "Friday Detention" component: any students who have not yet hit their school-determined weekly online program goals by Friday afternoon must go to the computer lab to work toward these goals,[31] while their peers take part in the "Friday Experience," a fun school-wide activity that takes place every Friday from 1:00 to 2:00 pm, shortly before dismissal.[32]

4. **A lack of universal home internet access has hampered some students' ability to benefit as much from the model.** A school survey during the 2010-11 school year found that about one-third of the students do not have home Internet access. There are also concerns that those who have the Internet may not have consistent access to it due to parent and/or sibling priority or other factors. This was more of a problem during the first few months of blended learning when many students were regularly not meeting their weekly goals and needed alternative avenues through which to complete their online work, but it was a concern nonetheless. As a response, Ashe opened its labs to students after school (until 5:30) and began offering computer time to its students on Saturday mornings as well. School leaders are also encouraged by the recently announced federal program which aims to secure Internet access for families of Free/Reduced Lunch students for $10/month. The school is already planning a partnership with a local broadband services company which would provide the internet to Ashe families who are eligible for this program.

Blended Learning and the Future of FirstLine Schools

The long-term plan for FirstLine Schools is that blended learning will be incorporated into all five of their sites, across all grade levels, by the 2013-14 school year. What is less clear is whether the schools will all be fully integrating the same model used at Ashe. Altman likes for his schools to have discretion on such things and he is hesitant to prescribe every component of Ashe's design across the network. "There's no one size fits all solution to this," he says but adds that the most effective elements of the

[31] Pence points out that the number of students not meeting their goals and needing to go to Friday detention dropped to the single digits by April of this past school year, from dozens earlier in the year.

[32] Friday Experience activities have included students-against-teachers basketball games and a student fashion show. Friday is the school's early dismissal day: the students are dismissed at 2:30 pm.

Ashe model will be carried across the schools, to ensure some consistency throughout the network. Finally, as of now, there are no plans to expand the network, at least not until the CMO can perfect the model, according to Altman.

For Ashe more specifically, the plan ahead is to begin filling out its new school building, growing enrollment to 500 students during the recently begun school year and to 522 by 2014. The school will also continue to address its ongoing challenges. The ultimate goal is to get to a point where it can standardize or set formal protocols for in-flux and discretionary issues such as data integration, parent engagement, and lab grading.

Appendix

FirstLine Schools

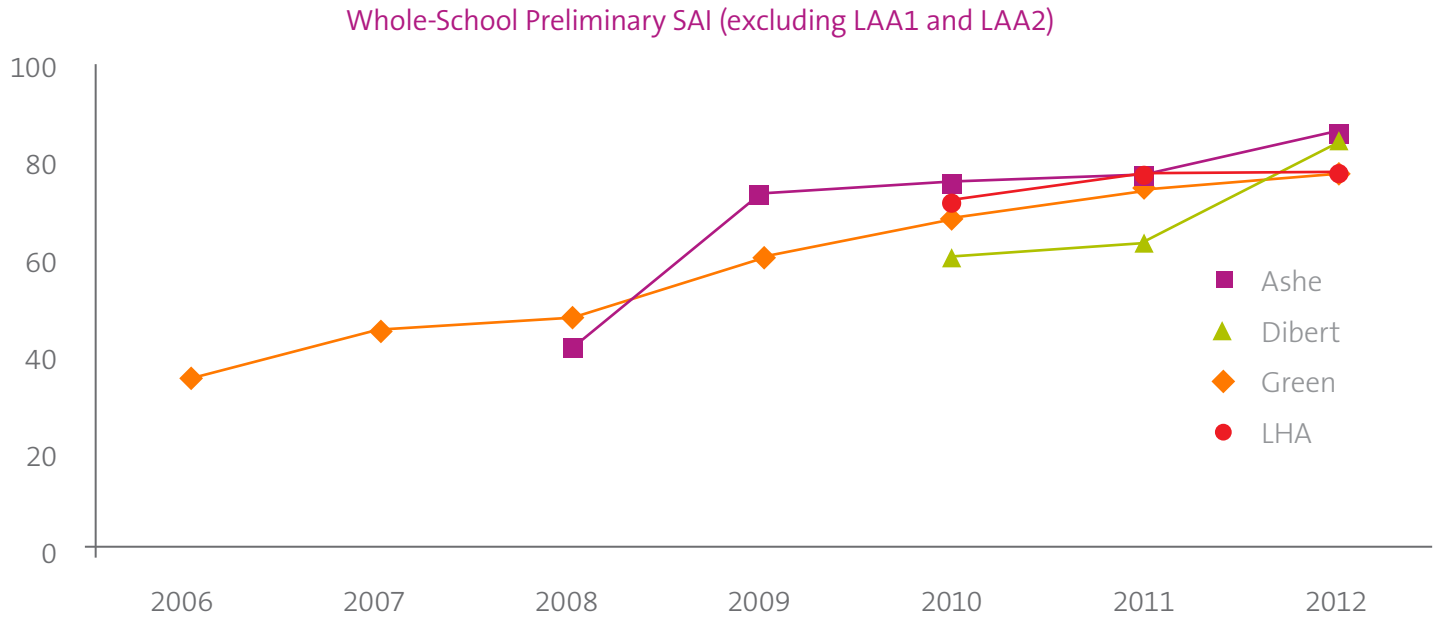
Note: Many of the appendices in the following have been provided by FirstLine Schools

Appendix 1:
Historical Results and Future Growth

Historical Louisiana Student Assessment Index (SAI) Results[33] [34]

FirstLine Schools are showing consistent growth; Ashe has improved more than 100% since 2008

Note: 2012 data are preliminary based on spring test scores without weighted adjustments for special education and summer school; final SAI figures will differ slightly and will be released in the fall



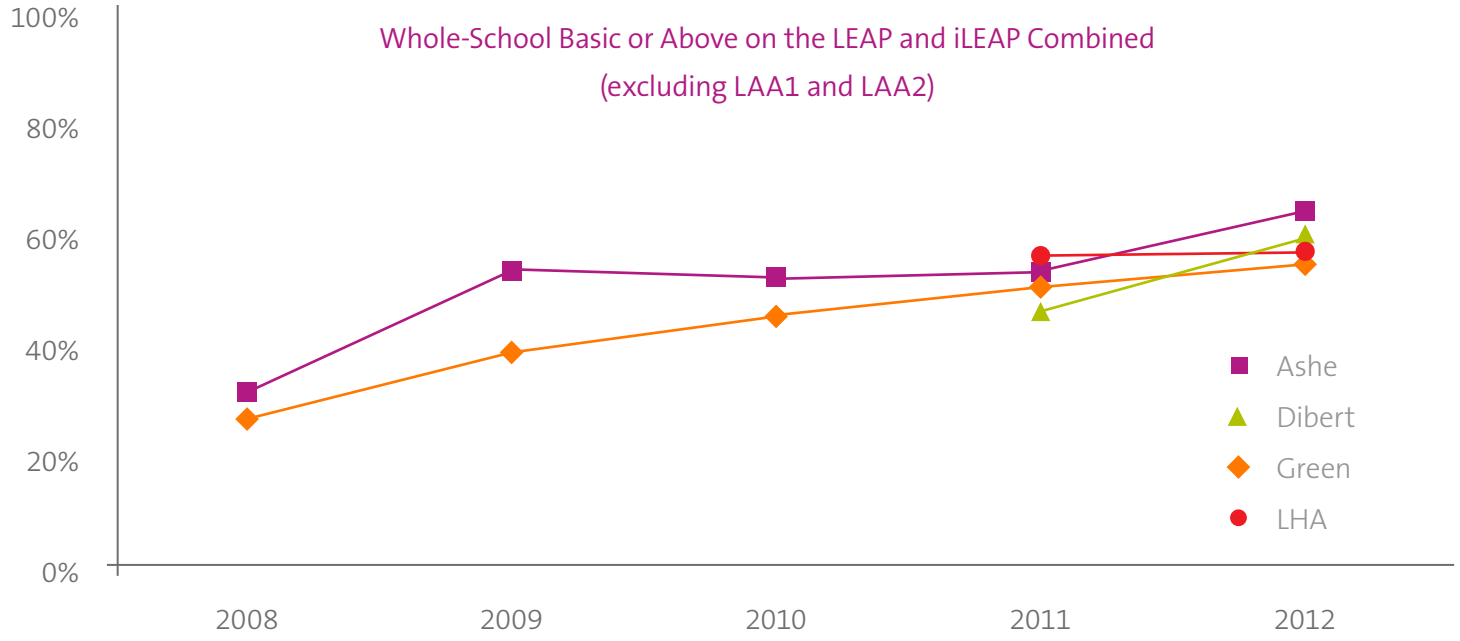
[33] Louisiana's Student Assessment Index (SAI) is based on overall student performance on the state assessments and is used to calculate School Performance Scores (SPS), the state's comprehensive school measurement statistic. The SPS also includes factors such as attendance and drop-out rates. FirstLine prefers to focus on the SAI as a truer indicator of student results.

[34] LAA1 and LAA2 refer to Louisiana Alternate Assessments. The LAA1 is for students with severe cognitive difficulties. The LAA2 is for students with less severe learning challenges but who are two or more years behind grade level and have scored poorly on prior exams. FirstLine does not have many students who qualify for these assessments.

Appendix 1:
Historical Results and Future Growth (cont'd.)

Historical State Assessment Results[35]

FirstLine Schools are showing consistent growth in the Louisiana state assessments, the LEAP and iLEAP



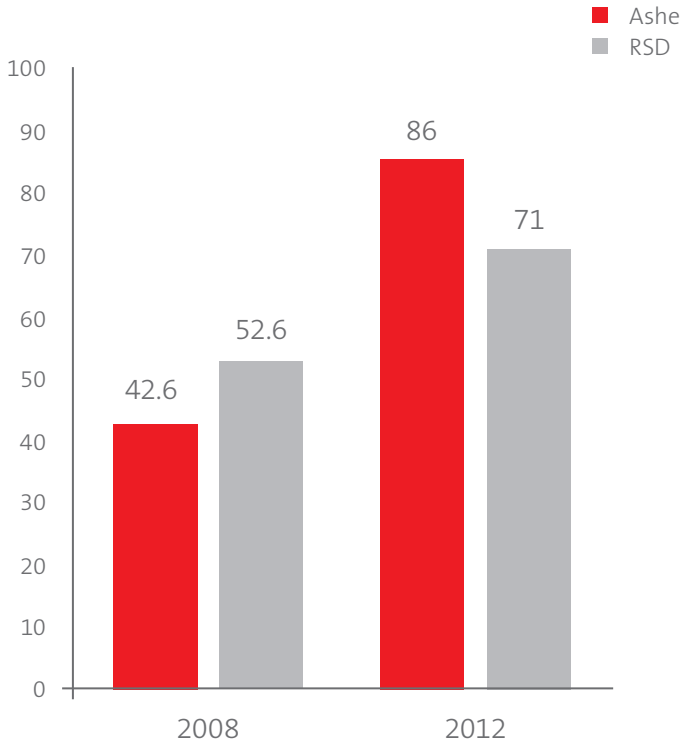
[35] Students scoring at the "Basic" level are at or above grade level; Louisiana does not currently use a "Proficient" designation.

Appendix 1:
Historical Results and Future Growth (cont'd.)

Ashe Has Become One of the Top-Performing Schools in New Orleans' Recovery School District

The school's overall SAI has risen roughly 100% since 2008,[36] overtaking the RSD average;
Ashe's LEAP scores are among the best in the district[37]

Ashe's SAI vs. Average for Recovery School District (K-8 schools only)

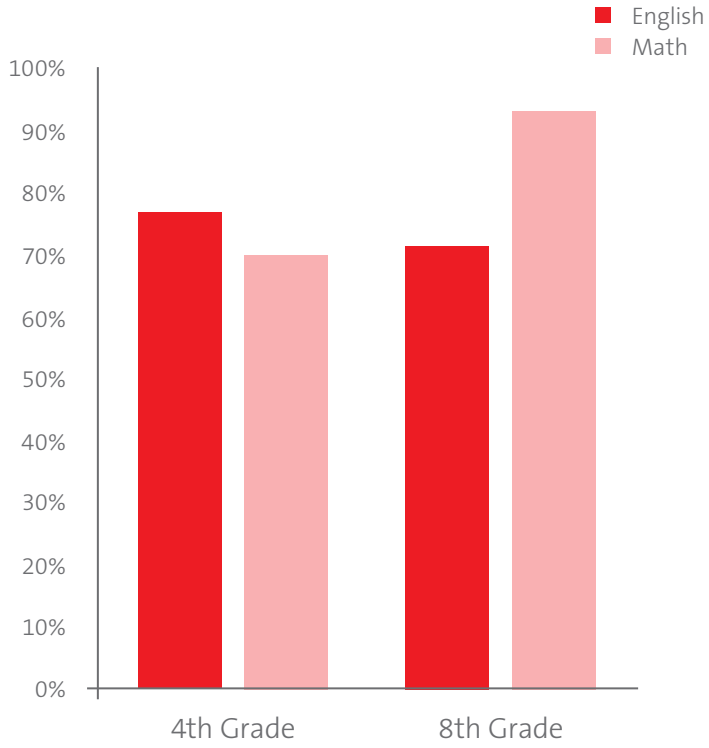


Ashe's Ranking among all RSD Schools in New Orleans:

29th (2008)

10th (2012)

4th and 8th Grade Basic or Above, English and Math LEAP



Ashe's Ranking among all RSD Schools in New Orleans:

8th 10th (4th Grade)

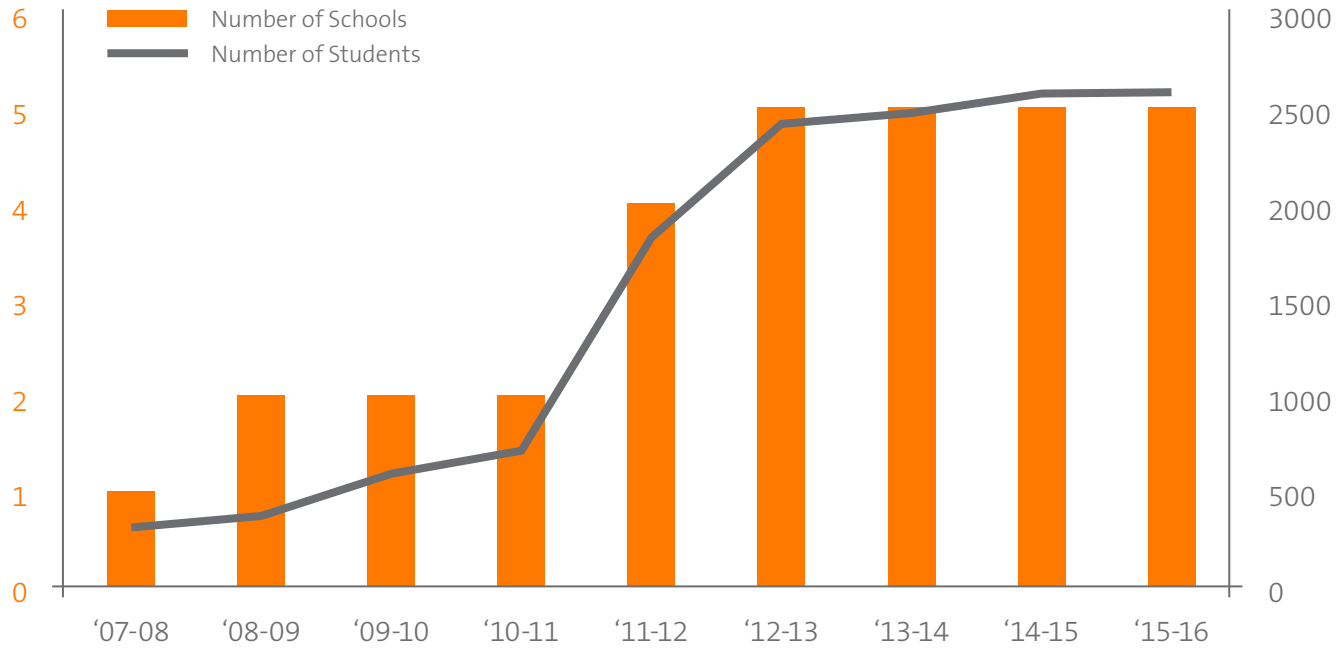
6th 1st (8th Grade)

[36] The 2012 SAI data presented here are preliminary and will not become official until the fall.

[37] At the time of the 2012 LEAP, there were 45 RSD schools in New Orleans which took the 4th-grade exam (including direct-run and charter schools); there were 41 which took the 8th-grade exam. The RSD governs most, but not all, of the open admissions schools in New Orleans. The district also governs a small number of schools outside of New Orleans, though these are not reflected in the numbers above.

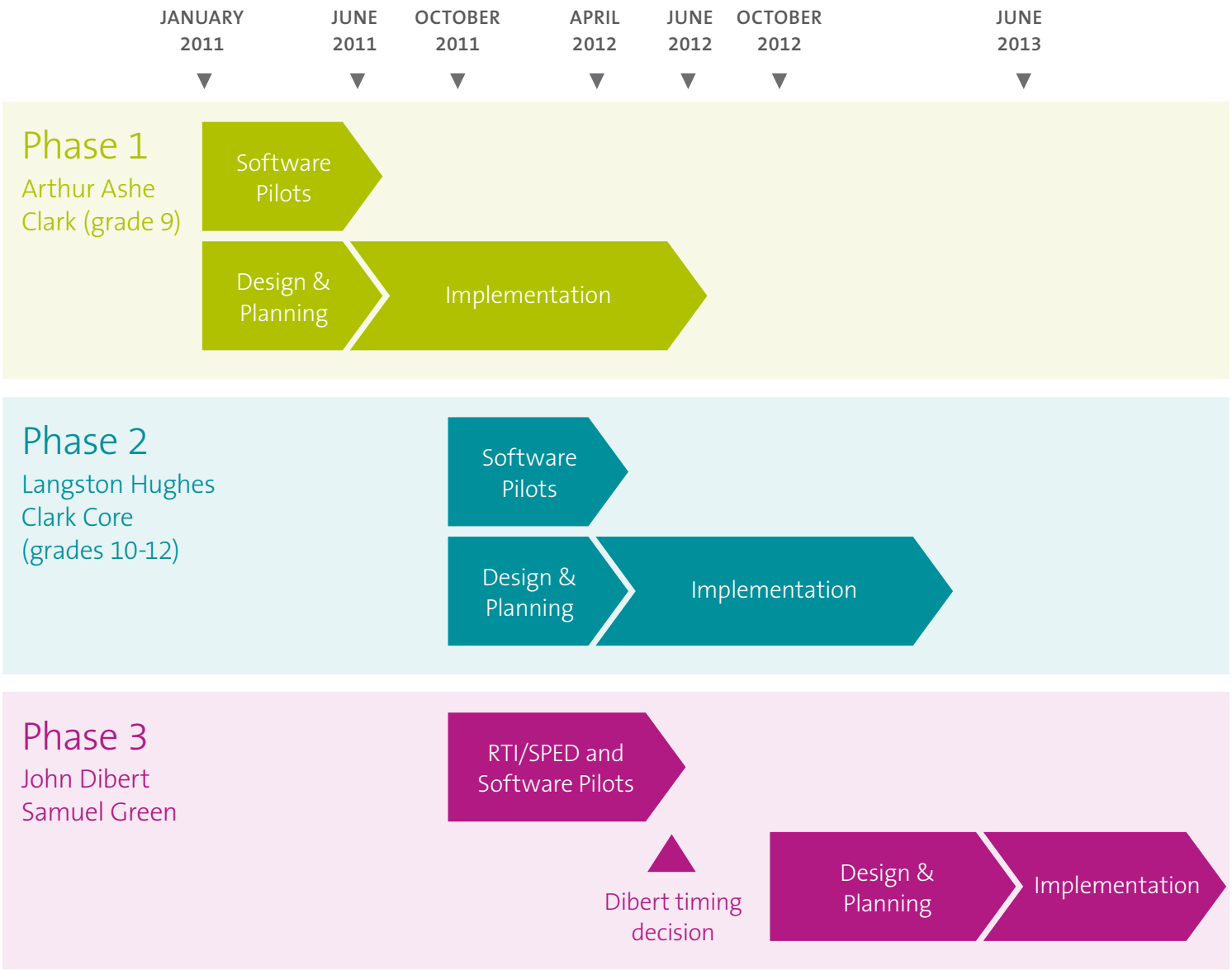
Appendix 1:
Historical Results and Future Growth (cont'd.)

FirstLine Has No Plans for Network Expansion but Expects Further Growth in Student Enrollment due to Available School Capacity



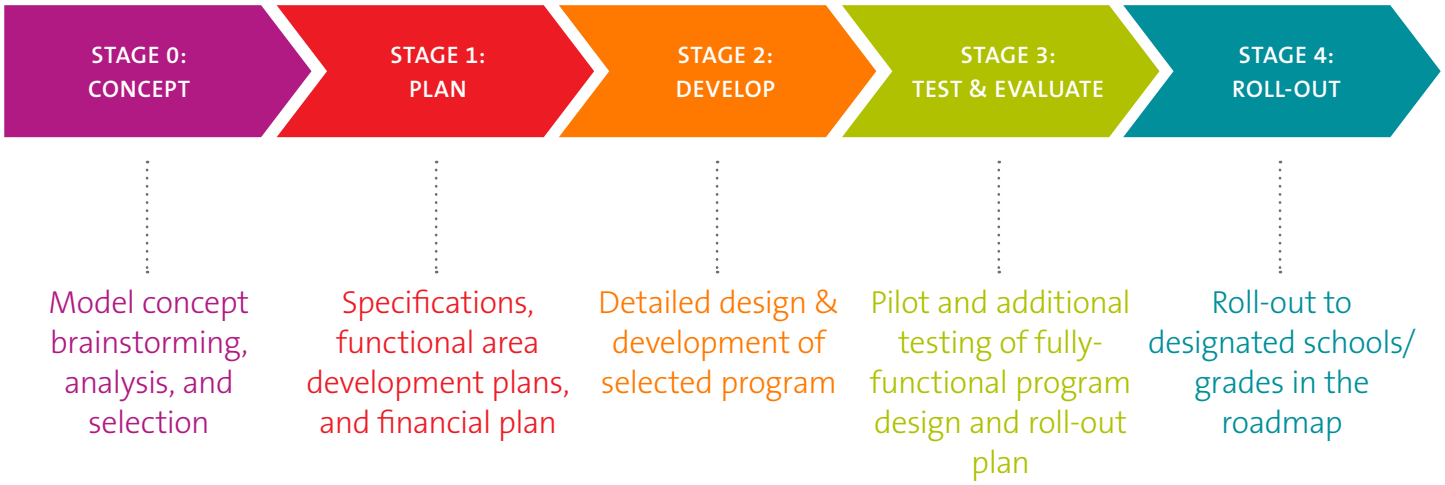
Appendix 2:
Project Plan for Launching Blended Learning

All FirstLine Schools Will Implement Blended Learning by the Start of the 2013-14 School Year



Appendix 2:
Project Plan for Launching Blended Learning (cont'd.)

Each School Will Follow the Same Implementation Path Followed by Ashe and Clark



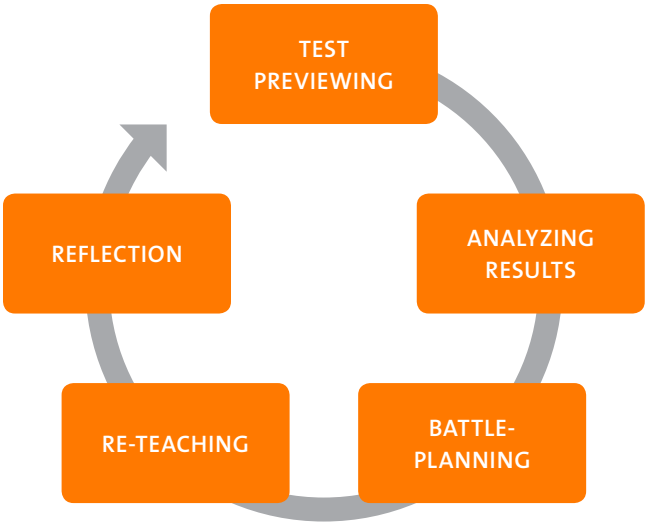
Appendix 3:
Instructional Model – Details on Instructional Materials and Assessments

The Ashe Charter System of Assessments Supports a Continuous Improvement Cycle and Multiple Differentiation Strategies

Annual Assessment Schedule

ASSESSMENT	Exit Tickets	Weekly Tracker	Unit Assessments	Interim Assessments	Terra Nova DIBELS CBT Diagnostic Assessments	State Assessments
FREQUENCY	Daily	Weekly	Every 3-6 weeks	Every 2 months	2-3 times per year	Annual

Continuous Improvement Cycle



The cycle is most formally implemented around the interim assessments every two months but informs instruction on a regular basis.

Four Tiers of Instruction during Lab Time

TIER I	General Education
TIER II	Less Intensive RTI
TIER III	More Intensive RTI
SPED	Small-group Special Education Instruction

Differentiation in the Classroom with Partner Teachers and Small Groups

Appendix 3:
Instructional Model – Details on Instructional Materials and Assessments (cont'd.)

Ashe Charter's Suite of Online Content Providers

(projected for 2012-13)

SUBJECT	K-2	3-8
ELA Screener – used at start of year to identify reading/skill gaps and assign tiers; also used monthly to track growth	DIBELS iSTEEP	iSTEEP
Independent Reading	Accelerated Reader	Accelerated Reader
Tier I ELA	Reading Eggs iReady Reading Xpress	Vocab Journey Blogs (GoogleApps + Hapara) iReady
Tier II ELA		SuccessMaker
Tier III and SPED ELA	ReadWell Ticket to Read	Language! Passport Reading Journeys
Exceptionally High Needs SPED ELA	Fast ForWord	Fast ForWord
Math Screener	iSTEEP	iSTEEP
Tier I Math	iReady STMath STMath Fluency	Apangea STMath STMath Fluency
Tier II Math		SuccessMaker
Tier III and SPED Math		Vmath
Tech Literacy – for online safety, basic computer knowledge, etc.	Easy Tech	EasyTech TypingPal

** For those subjects/tiers where no program is listed, the Lab Coaches or RTI Instructors will choose programs from other tiers.*

Appendix 3:
Instructional Model – Details on Instructional Materials and Assessments (cont'd.)

Ashe Charter School's Blended Learning Lab Cultural Rubric

The following is an excerpt of the five-pronged rubric Ashe Charter School uses to evaluate the culture within its computer labs each day. The three remaining stages within the lab covered by this rubric (not shown below) include the students' behavior for learning during the class, the student's behavior for learning at the end of class, and the level of hardware functionality and use.

BLENDED LEARNING LAB CULTURAL RUBRIC 1: BEHAVIOR FOR LEARNING – START OF CLASS

	5	3	1
Students enter classroom quietly and respectfully	= all students	= all and only 1-2 need to be asked individually	= more than 2 students do not meet expectation or only 1-2 but teacher doesn't direct these 1-2
Students set up stations (personal tracking sheet, scratch paper, etc.)	= all students have all materials	= all and only 1-2 need to be asked individually	= more than 2 students do not meet expectation or only 1-2 but teacher doesn't direct 1-2
Students put on headphones	= 3 minutes, all students	= all and only 1-2 need to be asked individually	= more than 2 students do not meet expectation or only 1-2 but teacher doesn't direct 1-2
Students login and start work on proper program	= all students within 3 minutes	= all within 3-4 minutes	= all within 4 minutes or more
AVERAGE			

Appendix 3:
Instructional Model – Details on Instructional Materials and Assessments (cont'd.)

Ashe Charter School's Blended Learning Lab Cultural Rubric (cont'd.)

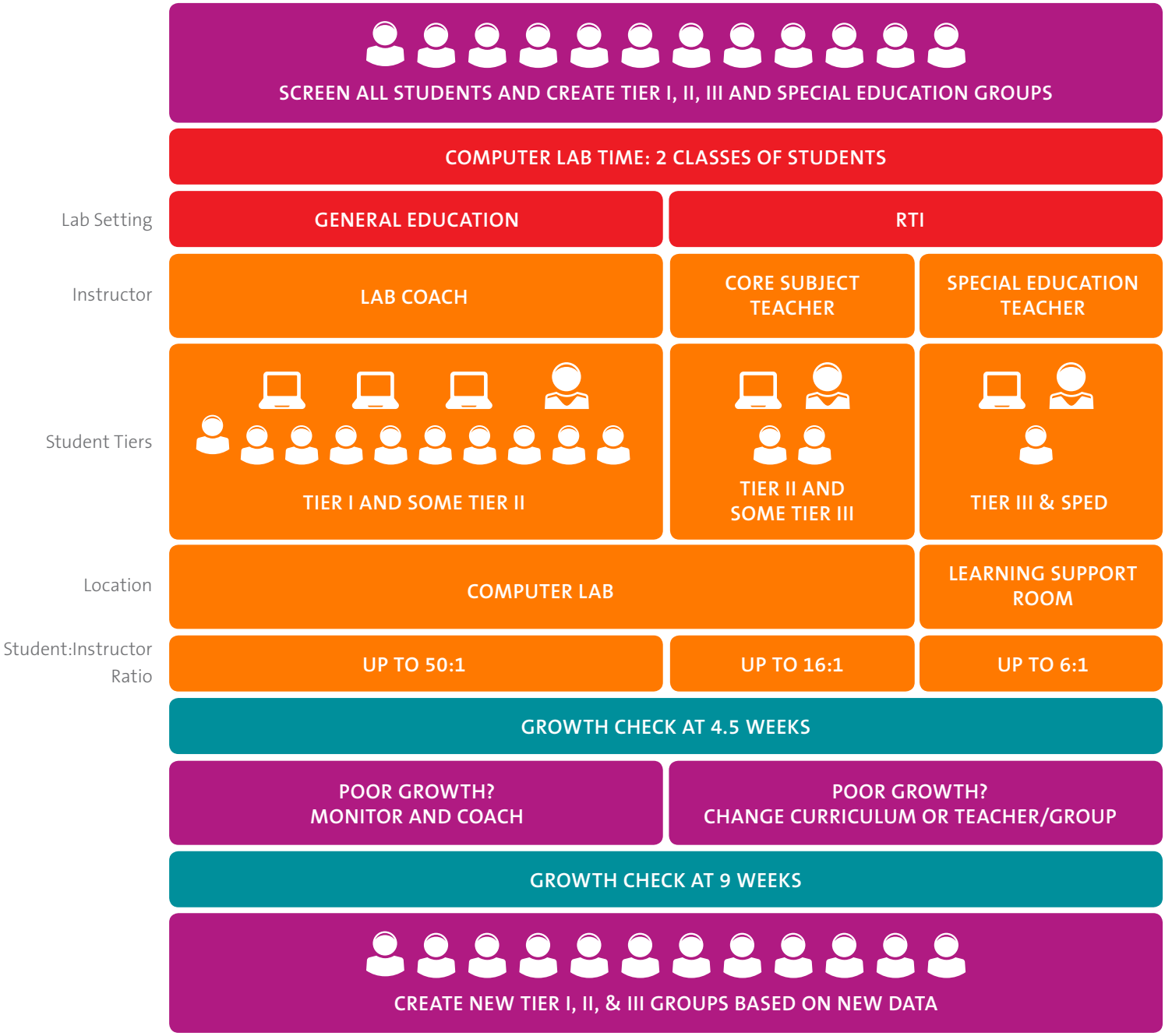
BLENDED LEARNING LAB CULTURAL RUBRIC 2: BOARD & TRACKING

	5	3	1
Software schedule	= week's software schedule posted	= only today's schedule written	= software schedule not communicated
Individual weekly goals	= goals and deadline posted = progress chart up to date = students can recite individual goals	= not all goals written = progress chart not up to date = students cannot recite individual goals	= individual weekly goals not communicated or tracked
Benefits/rewards	= positive outcomes of completing weekly goals posted = students can recite	= positive outcomes posted but students are not aware of them	= no positive outcomes posted
Personal tracking sheet	= all students using personal tracking sheet	= all and only 1-2 need to be asked individually	= more than 2 students do not use tracking sheet
Class goals	= class goal posted and progress chart up to date	= only goal written = progress chart not up to date	= class goal not communicated or tracked
Exceptional Students	= exceptional students posted (shout-outs)	= exceptional students posted but more than 1 month old	= no exceptional students celebrated
AVERAGE			

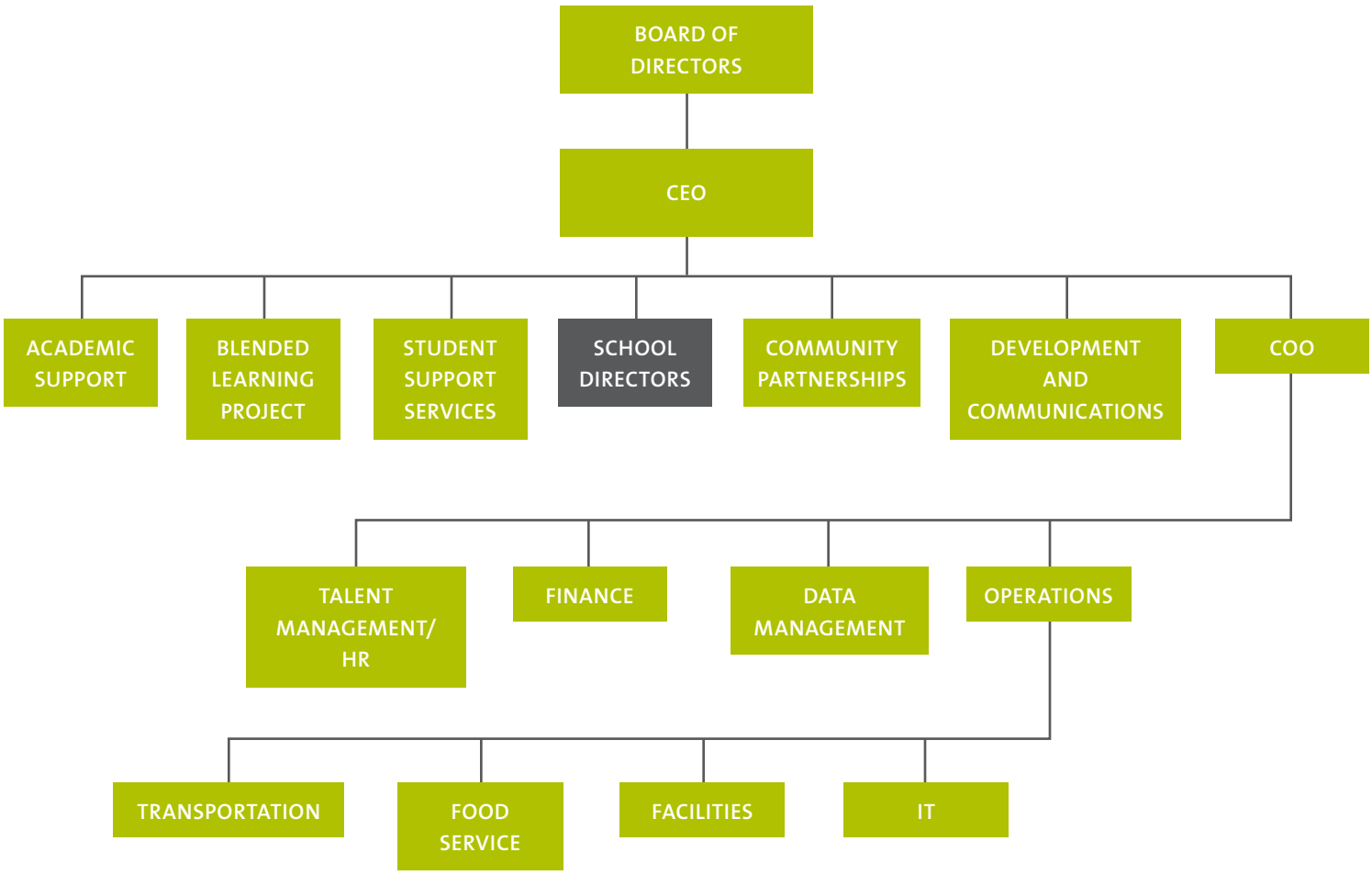
Appendix 3:
Instructional Model – Details on Instructional Materials and Assessments (cont'd.)

A Tiered Strategy to Providing Responsive Learning Support

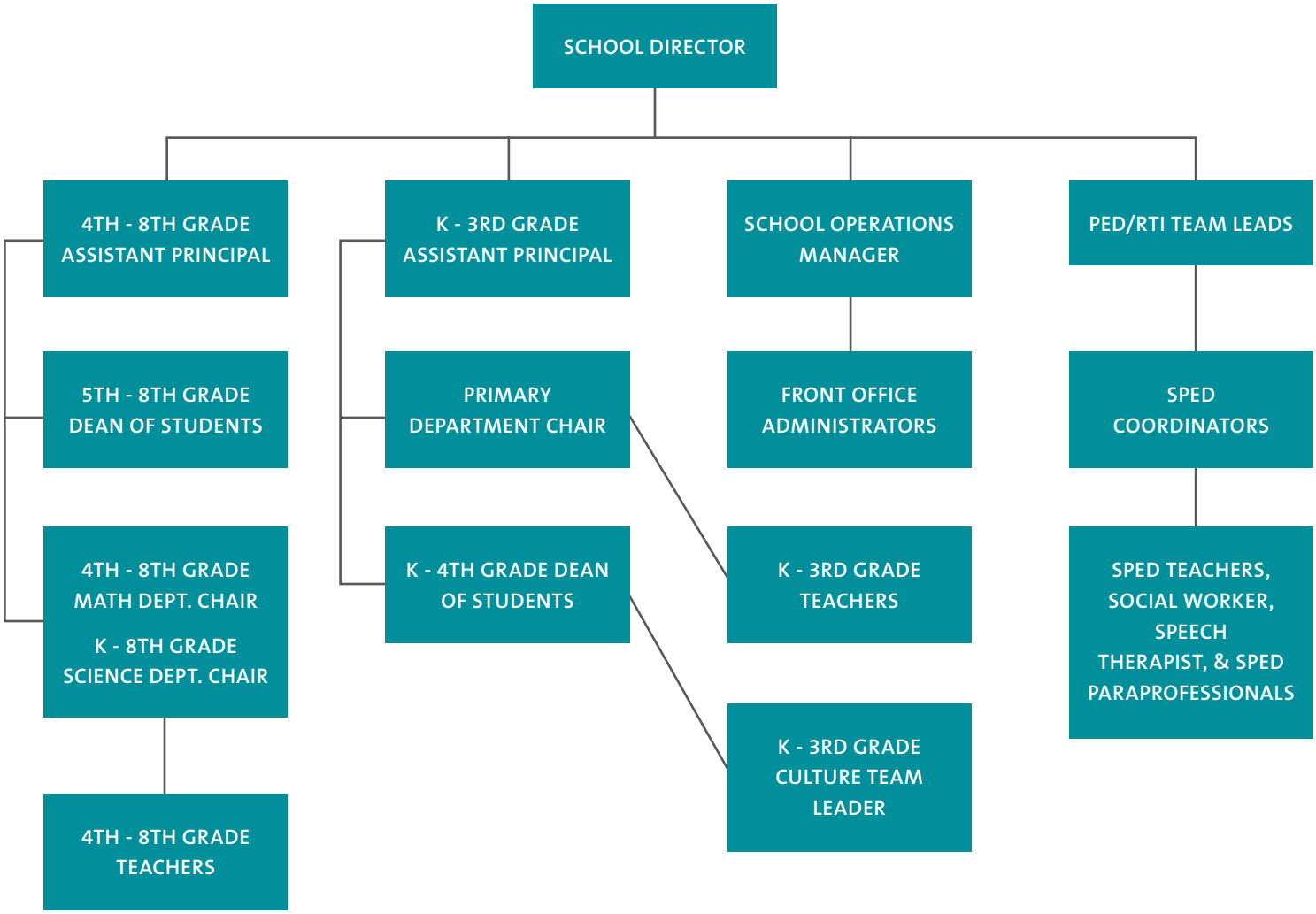
Ashe groups students into tiers at the beginning of the year, provides them with online software and instructional support intended to meet their needs, and then monitors the effectiveness of the software and the instruction in supporting student growth.



Appendix 4:
FirstLine Schools Organizational Structure



Appendix 5:
Arthur Ashe Charter School Organizational Structure



Appendix 6:
Detailed School Schedule

Sample Schedule for Grades K, 2, 4, 6, and 8

	KA	2A	4A	6A	8A
8:30 - 9:00	Morning Meeting	Morning Meeting	Breakfast	Breakfast	Breakfast
9:00 - 9:30	Breakfast	Breakfast	Advisory	Advisory	Advisory
9:30 - 10:00	ELA	Math	Math Lab / RTI / SPED	Independent Reading / RTI / SPED	Literature & Writing
10:00 - 10:30					
10:30 - 11:00	ELA Lab / RTI / SPED	Science	Math	Math Lab / RTI / SPED	Independent Reading / RTI / SPED
11:00 - 11:30	Math	ELA Lab / RTI / SPED		Math	Math
11:30 - 12:00		Math Lab / RTI / SPED	Science		
12:00 - 12:30	Recess	Recess	Lunch	P.E.	Lunch
12:30 - 1:00	Lunch Independent Reading	Lunch	Recess	Lunch	Recess
1:00 - 1:30	Enrichment	ELA	Literature & Writing	Science	Social Studies
1:30 - 2:00					
2:00 - 2:30	Math Lab / RTI / SPED		Social Studies	Literature & Writing	Math Lab / RTI / SPED
2:30 - 3:00	ELA	Enrichment	Independent Reading / RTI / SPED	Social Studies	Science
3:00 - 3:330					
3:30 - 4:00	Writing	Writing	Elective / ELA Lab / RTI / SPED	Elective / ELA Lab / RTI / SPED	Elective / ELA Lab / RTI / SPED
4:00 - 4:30	Science and SS	Independent Reading			

Note: In 2011-12, Ashe had two sections in grades K-5 (i.e., an A and a B in each grade). The school had one section in grades 6-8.

Appendix 6:
Detailed School Schedule (cont'd.)

Ashe Charter's Curriculum Map

The following depicts the total instructional minutes per day, by subject; 2010-11 and 2011-12 are shown, to indicate the differences in instructional time brought on by blended learning:

Ashe's Curriculum Map	2010-11		2011-12	
SUBJECT	**K-3**	**4-8**	**K-3**	**4-8**
Literature/Writing	0	100	30	50
Independent Reading/RTI			30	50
Grammar/RTI	45	50		
Other ELA	200	0	100	0
ELA Lab			30	25
ELA Total	**245**	**150**	**190**	**125**
Math Class	50	100	75	70
Problem-Solving/RTI		50		
Math Lab/RTI			30	50
Math Total	**50**	**150**	**105**	**120**
Science	15	50	15	50
Social Studies	15	50	15	50
Enrichment/Elective	50	0	50	25
Advisory/Morning Meeting	25	0	30	40
Breakfast	20	20	20	20
Lunch	20	20	20	20
Recess	20	20	20	30
Arrival/Dismissal Trans. Time	0	0	15	0
Total Minutes	**460**	460	**480**	**480**
Total Computer-Based Minutes	0	0	60	125
Computer-Based as % of Day	0%	0%	12.5%	26%

Appendix 7:
Support for Blended Learning

Professional Development

- Teachers meet one-on-one each week with School Director (principal) to discuss professional goals and progress
- 120 minute staff PD time on Fridays, which can be used for improving pedagogy and curriculum
- Network support staff (Director of Blended Learning, Blended Learning Project Manager, and others) provide PD support, particularly regarding intervention support for special education and Tier II and III students
- Blended learning PD focuses on continuous improvement specifically in the integration of student data into RTI, the lab culture, and the ongoing use of software programs to support instructional goals

Teaching & Planning Time

- 300 instructional minutes (including RTI) per teacher Monday - Thursday
- 50 minutes common planning time with grade-level teams Monday - Thursday
- 50 minute prep period Monday - Thursday
- 30 minutes common planning time Friday
- 120 minute staff PD time on Friday, which is often used for weekly data analysis and subsequent planning

CMO Supports

- Operations (including compliance)
- Facilities Development and Maintenance
- IT
- Vendor Management
- Finance
- Human Resources
- Development
- Public Relations / Marketing
- Data (both student information and assessment data)
- Academics (PD, leadership training, SPED)

Best Practices from Other Schools

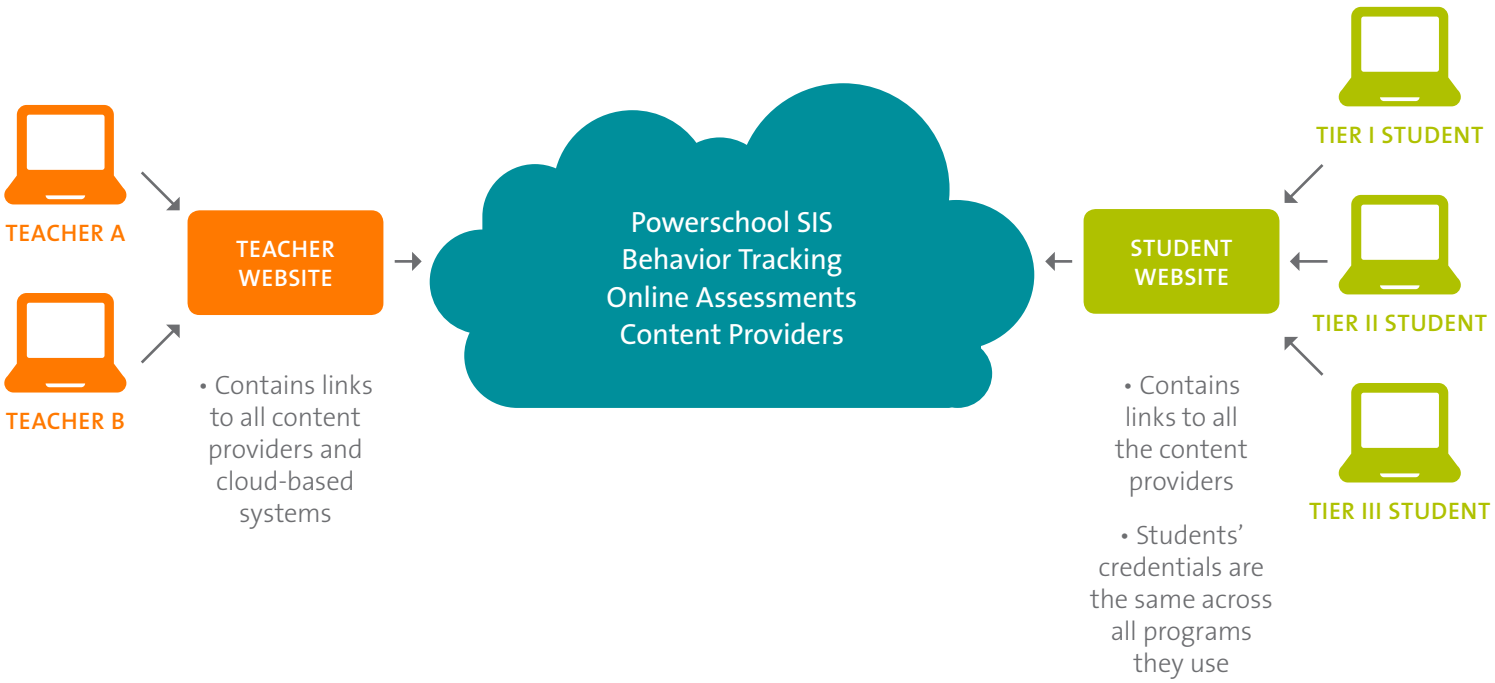
- The Director of Blended Learning and other members of the FirstLine team visited Rocketship Education, KIPP LA, School of One, and other schools incorporating blended learning to learn from practices at use in the field
- Ashe has participated in developing a shared learning cooperative with 9 other blended learning schools
- The Director of Blended Learning facilitates knowledge sharing among schools within the FirstLine network
- Teachers and school leaders are encouraged to visit other schools as part of their professional development

Appendix 8:
Technology Infrastructure

Ashe Uses a Simple Cloud-Based System: An Efficient, Reliable, and Cost-Effective Solution

Chris Liang-Vergara, FirstLine's Director of Blended Learning, points to this cloud-based system as providing value in three significant ways:

1. Preventing the need for local installs and enabling all data to flow into a single location
2. Enabling students to access any program from any computer
3. Using a Teacher / Student Website with links means a school's IT team does not have to worry about bookmarks or desktop icons



Appendix 9: Financial Detail

FirstLine expects Arthur Ashe Charter School to be sustainable on public revenue alone by 2013-14 (Year 3 of the blended learning model). Blended learning's ability to drive cost efficiencies is a critical part of this sustainability strategy, as is increased enrollment, made possible by a move to a new, higher capacity school building in 2012-13 (enrollment will increase from 422 in 2011-12 to 522 in 2013-14). The Year 3 positive net balance, including no required support from philanthropy, is reflected in the table below. The significant school-related blended learning costs are broken out on the right of the table. Note that the expenses involved with the CMO-level staffing positions reported earlier – the Director of Blended Learning and the Blended Learning Project Manager – are not listed here, as they are incurred by the network and not by the school. As with other CMO supports, any assistance that Ashe receives from these two positions is reflected as part of the Network Shared Services line item, a management services fee equal to 9% of public revenue.

Arthur Ashe Charter School Budget Summary Table

Years 1 - 3 of Blended Learning Model

SCHOOL YEAR	2011-12	2012-13	2013-14	
ENROLLMENT	**422**	**464**	**522**	
REVENUE				
Public Revenue	$4,471,401	$4,772,875	$5,139,166	
Fundraising Revenue	$0	$10,000	$0	
Other Revenue (food service revenue and medicare)	$289,070	$347,840	$387,570	
TOTAL EXPECTED REVENUE	**$4,760,471**	**$5,130,715**	**$5,526,736**	
EXPENSES				
Education Program				
Education Program Personnel	$2,014,619	$2,049,563	$2,242,460	
Education Program Non-Personnel Costs	$368,103	$373,404	$524,127	→ *Includes $125,280 in instructional software costs*
TOTAL EDUCATION PROGRAM EXPENSE	**$2,382,722**	**$2,422,867**	**$2,766,587**	
Student Support				
Student Support Personnel	$187,678	$284,322	$284,322	→ *Includes $84,199 in salaries and benefits for two Lab Coaches*
Student Support Non-Personnel Costs	$202,093	$77,456	$97,688	
TOTAL STUDENT SUPPORT EXPENSE	**$389,771**	**$361,778**	**$382,010**	
Leadership and General Administrative				
Leadership and General Admin. Personnel	$533,454	$568,006	$568,006	
General Admin. Non-Personnel Costs	$396,902	$522,811	$570,406	→ *Includes $52,200 in computer and printer depreciation costs (including some computers and printers not tied to the blended learning model)*
TOTAL STUDENT SUPPORT EXPENSE	**$930,356**	**$1,090,817**	**$1,138,413**	
Essential Services				
Transportation	$325,000	$483,330	$363,900	
Food Services	$291,810	$317,840	$357,570	
TOTAL STUDENT SUPPORT EXPENSE	**$616,810**	**$801,170**	**$721,470**	
Central Services				
Contingency	$84,420	$0	$51,692	
Network Shared Services	$506,519	$552,402	$465,225	
TOTAL STUDENT SUPPORT EXPENSE	**$590,939**	**$552,402**	**$516,917**	
TOTAL EXPECTED EXPENDITURES	**$4,910,597**	**$5,229,134**	**$5,525,396**	
NET INCOME OR LOSS	**($150,126)**	**($98,419)**	**$1,341**	
PER PUPIL				
Revenue	$11,280.74	$11,057.58	$10,587.62	
Expenses	$11,636.49	$11,269.69	$10,585.05	
NET INCOME OR LOSS PER PUPIL	**($355.75)**	**($212.11)**	**$2.57**	

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For questions or comments on this case study, please contact:
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