1

Identifying the Focus and Piloting

Having shared some of my findings about blended learning in recent years, I find that I'm often called on by educators around the nation. School leaders, consultants, instructional technology coaches, and teachers ask for my opinions and advice about going blended and want to tour our blended schools and get copies of documents we've put together. Many principals and teachers within Aspire also call me for technology-related advice. Here's how a typical call might go:

PRINCIPAL: We'd like to get a cart of Chromebooks/iPads/laptops for our students.

ME: Tell me more. How will your teachers plan to use these new devices?

PRINCIPAL: We want students using more technology and figure they can start accessing apps and programs to do their work. We want them to be 21st-century learners, and we know they need to use technology more for learning.

ME: OK, tell me more about your plans. Which teachers? Which apps? Do you have specific outcomes you're aiming for?

PRINCIPAL: I'm not sure. It'll vary from classroom to classroom.

ME: OK. Do you have a plan around who will be responsible for the devices? Train the teachers? Focus your program and app purchasing decisions?

And so it goes on. Usually, at this point, the principal gets a little frustrated with me. These conversations are common in our schools, as that's how technology purchasing has historically happened in our organization and in schools across the country. The problem is that this type of technology procurement for schools, while well-meaning, misses a huge opportunity for school leaders: using technology to solve instructional problems. As tempting as it is, technology shouldn't be used for technology's sake. Getting large-scale technology up and running in a school is incredibly hard work, and it's easy to blame technology when problems arise. However, if school leaders identify the problem they're trying to use technology to help solve, then teachers can focus on solving the problem, rather than focus on the technology itself.

FOCUS ON THE INSTRUCTIONAL PROBLEM YOU'RE TRYING TO SOLVE

Hire technology to help you solve one of your pressing instructional problems, not for technology's sake. Getting schools to identify and focus on a single instructional program is tricky. Schools have many (sometimes competing) priorities.

> Technology is not always the right answer. If there's a better way to solve the problem without technology, then it's probably the wrong problem to hire technology to help you solve. Don't go blended for blended learning's sake, because when times get tough (bandwidth goes down, devices break, software doesn't integrate, or one of the other million things that can go wrong does go wrong), teachers will blame technology, and you'll be stuck. However, when the technology lets you down, ask yourself whether there's a better way to solve your instructional problem. If there isn't, you'll be able to forge ahead through your technology problems with greater resolve.

These are some examples of instructional problems to solve using technology:

- How can we better support teachers to provide more and better small-group differentiated instruction?

- How can we remediate and accelerate the learning of the students on both ends of the curve, whom we're not serving as well as the majority of students?
- How can we improve the ways we're leveraging homework time?
- How can we create more instructional time for a particular topic?
- How can we increase the amount of writing students are doing in all content areas?
- How can we capture over time student work to gauge progress and improve our instructional program?
- How can we identify and help struggling students more quickly and efficiently using data?
- How can we reduce the number of our graduates who need to take remedial math upon entering college?

The problem you're identifying should be measurable and ultimately solvable over time, after which you'll find a new problem to solve. It also should be an instructional problem, as technology does not improve student learning as a highly effective teacher does. **Keep your focus on improving instruction and ultimately student learning using data.**

Sample Problem Technology Might Be Hired to Solve: Lack of consistent school-wide small-group instruction (Aspire Public Schools).

A few months back, I worked with a teacher team who agreed that differentiated, small-group instruction was their most effective means for increasing student achievement, yet some teachers in the school pulled only one or two small guided-reading groups per day, while others couldn't figure out how to manage their classes tightly enough to make any small-group instruction effective.

Solution: Lab rotation to support teachers with small groups.

We arrived at a plan to pull out half the class during reading instruction to utilize computers in a lab for remediation/acceleration in math and English language arts (ELA), while classroom teachers could focus on practicing pulling three small guided-reading groups and managing the remaining students in independent reading. In this way, teachers felt they would be more supported for getting their management and small-group instructional routines in place.

Key Advice: Stay focused on the problem!

During the planning session, the teachers were engaged and excited about the new plan. Then, one teacher suggested that she also wanted to teach *just* ELA and social studies, reasoning that if teachers were allowed to specialize, they could do a better job with planning. My response to her was that the school was small, which meant that if teachers specialized in content, they'd probably be teaching that content to three or even four grade levels of students. The teachers were undeterred, as they were already thinking about how much easier their lives would be if they only had to plan for two content areas. So, we revisited the problem: If teachers specialized in teaching content, would this solve their primary instructional problem? That is, would specializing in content allow them to improve the lack of consistent small-group instruction? The answer was no—teachers would have less time with their students in a content-cored classroom (as student schedules would be blocked, instead of being self-contained) and would face the same small-group instructional challenges and barriers they currently faced. Although this exploration was important to the team, having the teacher team that was charged with rolling out blended learning articulate the identified problem helped us stay focused on finding ways to solve it.

Sample Problem Technology Might Be Hired to Solve: Not enough students were reaping the benefits of small-group instruction (Aspire Public Schools).

In one of our schools, we asked teachers how many small differentiated groups they were pulling each day, and then asked the teachers whether they felt student achievement would improve if they pulled more small groups. The teachers all agreed that achievement would improve, but they couldn't figure out how to pull more small groups given all the other demands on their time with their students.

Solution: In-class rotation to support differentiated groups.

We used the data (the number of small groups pulled) to set goals for using blended learning to increase the number of groups pulled each day. Then, midyear, we counted how many small groups teachers were pulling, and the number was double what it was before we started. We still needed to analyze the student achievement data to see whether students were making gains at a greater rate than before, but we were encouraged that we could finally see what increasing group instruction could look like in our classrooms.

Key Advice: Determine ideal schedules that will allow teachers to achieve the goals set.

Originally, we had teachers determine how to structure their time in order to pull additional small groups during blended learning. While some teachers appreciated the autonomy of building their ideal schedules, many struggled with the logistical challenges of having a different instructional schedule. Sometimes, the focus shifted from "How can we pull more groups?" to "How can I squeeze in time for students to be on computers?" If you can't create samples of what you hope to achieve, how can you expect teachers to make your vision of blended learning happen? See appendixes L and M for sample schedules.

Sample Problem Technology Might Be Hired to Solve: Teachers holding students to varying levels of rigor in terms of content acquisition (Summit Public Schools).

Summit Public Schools, a charter management organization (CMO) in the San Francisco Bay Area, wanted to redesign its model to ensure that all graduates had the content knowledge they needed to avoid remedial college courses.

Solution: Summit's teachers created digital content guides for each subject and course as a framework to allow students and parents to see all the content each course encompassed.

For each unit of content, Summit curated an online playlist of open educational resources, then created a short assessment that a student can take on demand through the assessment system. Finally, Summit developed its Personalized Learning Plan (PLP) application, which provides the framework for students to access the curriculum. Jon Deane, Summit's chief information officer, says, "If we want our students to really drive their own learning, and we want to hold them to a high standard for competency in content knowledge, then we knew we had to create the tools to give them access anytime, anywhere. Our students should always be able to see what they know, what they need to know, and have access to the tools to learn it."

Key Advice: Putting into place a competency-based approach requires a great deal of teacher collaboration to articulate the necessary content, a strong assessment system, and, most important, a school-wide culture that supports student-driven learning. Once you have your goals and your assessment system down, you can design the instructional program to support how you want students to learn.

For a quality blended learning implementation, student achievement data should be your focus, as should your plans to scale blended learning across the school or the district. Consider what your students' top needs are and prioritize

them to identify the instructional problem you plan to "hire" blended learning to solve. Do students struggle with reading comprehension? Are all students proficient or advanced in math at their grade level? Jon Deane, chief information officer at Summit Public Schools in San Jose, offers this perspective:

> At Summit, we were in the midst of a deep dive into college persistence data as our first high-school class was nearing the end of its fourth year in college. We were getting feedback from our graduates that one of the biggest hurdles to persistence was the requirement to take remedial courses, especially in math. We approached blended learning to help us better prepare students with fundamental math work so that they could avoid the need for remediation in college.

SOLICIT INPUT FROM DIFFERENT STAKEHOLDERS

Chris Liang-Vergara, former director of instructional technology for personalized learning at FirstLine Schools in New Orleans, and now at LEAP Innovations, suggests engaging your school community to build the model and design it for each of the community's different needs: "Create a user-designed experience based off of interviews with school leadership, teachers, support staff, parents, and students. Interview extremes within the organization and create a map to see common needs/ trends. They will come out very organically through conversations with the staff." Different stakeholders provide important contributions and allow you to create buy-in from the very beginning of the process.

ARTICULATE HOW YOU'LL MEASURE SUCCESS

Technology use and time spent on computers are not ways to measure success; consider student achievement, increase in small-group instruction, additional course offerings, growth opportunities for gifted students, and teacher sustainability as some possible viable measurements. Tom Willis, chief executive officer of Cornerstone Charter Schools in Detroit, explains:

> Learning, learning and learning. That should be the focus. Simply put, we wanted to move the needle towards even better learning for our students.

I was always a bit skeptical of virtual/online learning because of its rela-
tively small demand (i.e., only works well for certain kids), but the concept
of blended learning made all the sense in the world to us.

Likewise, consider the impact on teachers when calculating success. Caryn
Voskuil, former school model innovation manager at Rocketship Education in San
Jose, California, shares:

Another way we measure success is in demonstrated lift provided to teachers.
Our teachers feel the success of blended learning when the computer does
something more efficiently than they could themselves, such as assessment
and data collection, as well as "tagging" content to an individual student who
may need it most. Our teachers like when alerts are assigned to students, so
they can provide on-the-spot intervention or suggested practice items to stu-
dents identified by the computer.

DON'T BE SEDUCED BY THE TOOLS OR DEVICES

At this point in the process, keep your focus on the learning. It's incredibly easy to
be distracted by "bright shiny objects": slick tablets, engaging gaming programs,
touch-screen desktops, and beautiful interfaces.

Technology can be incredibly seductive to adults and kids. One need not look
further than the proliferation of iPads across schools to recognize the hold that
tools have over our imaginations. However, putting in the tools without a plan or
problem to solve at best invites experimentation and at worst wastes time and
money.

Consider the following scenarios and their underlying problems, which can
complicate or undermine your implementation before you even get it off the ground.

Scenario 1: Principal Jones wants to deploy iPads for all seniors to help them
become more college ready. Having these mobile devices will allow students to

search for content online when researching, submit papers to their teachers, and access any open educational resources their teachers find to supplement the content.

Potential Problem 1: The principal is defining college readiness by the use of technology, but not in any targeted or strategic way. Using technology alone does not make one college ready.

Potential Problem 2: The cart (the iPads) is being put before the horse (the teachers). Without a clear plan for how teachers will use this technology, the implementation will rely strongly on teachers with the greatest skill and putting forth the greatest effort. Success may not be quantifiable, and teachers may be distracted from their core purpose.

Potential Problem #3: Over time, the allure of new technology as engaging wears off, no matter how wonderful the device may seem out of the box. By relying on technology's inherent engagement, school leaders may find themselves in a bind once the magic wears off.

Scenario 2: The math department has suggested that students love math when they use math-based video games for instruction and has asked the principal to purchase math software for all students to use to supplement in-class math instruction.

Potential Problem 1: This scenario sets up a dichotomy between "love of math" (on games) and presumably "no love of math" (from the teacher). Less experienced teachers may abdicate some of their control and authority over the class in the interest of showing kids more love, rather than sharpening the teachers' own skills to leverage students' interest in math and foster a love of math.

Potential Problem 2: The student achievement data may not point to a need for increased math. Deploying technology strategically means looking at the data, identifying the greatest needs and determining whether the costs match the needs. Spending 50 percent of a school's software budget on math gaming software (not to mention the actual devices on which to play the games) may be an unequitable way to focus on your student achievement.

Potential Problem 3: Engagement does not always equal learning. All software is not created equal, and although many products boast Common Core or State Standards alignment, it's worth digging into exactly what "alignment" means. If a product has weak data dashboards or does not articulate the specific standards

students are mastering, or if the problems and games don't clearly map to standards themselves, you might be outsourcing valuable instructional time to something that just won't pay off with achievement.

While these scenarios are fictional, the concerns that underpin them are not. In summary, keep in mind the following cautions:

- Use technology to achieve educational outcomes, not as an end to itself.
- Plan your implementation by engaging teachers in the work, then roll out the devices to achieve the work. Don't assume that teachers will or should figure out how the technology should be used after it arrives in the building.
- Technology engagement will wane. Keep teachers focused on how to make their own instruction engaging, rather than relying on the software to engage students.
- Use student achievement data to identify where to best spend your software and hardware dollars.
- Question "alignment," and have someone with deep content knowledge critically examine the content, assessment items or activities, and actual data outputs.

COMMIT TO RUNNING PILOTS

Before you begin, follow this key advice: Run a pilot of the model you plan to use. This work is incredibly complex, yet it offers rich learning opportunities. Some of these lessons are important, but small, and ultimately can be learned in a full rollout. Others are huge, and not understanding them can cripple a full rollout; these lessons and problems are much better learned and solved in a pilot (see table 1.1). In order to run a high-quality blended learning implementation, you'll need to run pilots! Nithi Thomas, blended learning manager at Mastery Charter Schools in Philadelphia, says, "Start small and find a model that is functional before you scale it up." We couldn't agree more. Pilots will save you money in the long run, as you'll make fewer costly mistakes.

In almost every case, the high-impact lessons learned are costly in both time and money and can detract from a school's effectiveness in getting blended off the ground.

Table 1.1 Examples of Lessons Learned in Pilots

Low-Impact Lessons Learned (OK to learn while doing blended on a small or large scale)	High-Impact Lessons Learned (better to learn on a smaller scale first, not during a full rollout)
Teachers take more time than expected to adjust to adaptive learning technology and may initially prefer assigning the majority of work for students to learn online (if the technology allows it).	Some teachers with mediocre classroom management before blended get markedly worse (and more difficult to support) during blended.
The schedule for blended learning does not allow for enough time on the computers to move achievement data.	The school's technology infrastructure (both the network and the bandwidth) is truly inadequate to support the increased number of devices running with blended.
The software reps are unresponsive to the school's needs.	Teachers are unable to create student accounts in bulk and must do them one by one.
Not all teachers or leaders are as "into blended" as originally thought now that their students are on the computers.	The school doesn't have enough tech support for teachers and students on the computers within the current school staff.
Students are not always doing what teachers intend them to be doing on the computers.	The school hasn't put into place adequate acceptable-use policies, cyber-safety policies, and password-security policies.
Teachers cannot figure out how to use the blended learning data and dismiss it.	Students have not adequately learned the routines and procedures for work on the computers.
	It takes longer—a lot longer—than you think it will for students to log in to the computer.

Because running blended is an expensive endeavor, we highly recommend piloting first to better understand your specific school's needs and challenges. Our pilots challenged many of our assumptions about what we thought would work, and we saved countless hours and dollars doing blended on a small scale before rolling it out school-wide—not that we didn't make many mistakes along the way!

Throughout this book, the issues and considerations are the same whether you're running pilots or fully converting a school.

MEASURE THE WORK

In order to measure each pilot, we drafted a rubric (see table 1.2) on which the pilot would be assessed. This is a work in progress but gives teachers and principals a clearer sense of the ways we hope to use a pilot to learn whether or not a blended learning model is right for our schools.

DO YOU NEED A CONSULTANT?

We're assuming you're reading this because you've already decided to go blended. However, read the book, as you'll need to understand the whole process whether or not you engage consultants to help you do this work. Some blended learning consultants provide services like conducting needs assessments and providing professional development for teachers, software integration, data integration, and ongoing support. We used a consultant when we started, and now we work on our own. Think of it this way: Consultants are like wedding planners. If you've never planned a wedding, you might find it incredibly supportive to have the help of a wedding planner every step of the way. Others might have a clear idea of their needs and wants, and the time and capacity to plan their wedding on their own. It's really up to you whether you will need to engage an outside group to help you with this work or can find the capacity within. There's no right answer—in blended learning or in wedding planning, for that matter!

Table 1.2 Decision Criteria Rubric

FIT (How does the content fit with Aspire's instructional program and goals?)

- Implementation of program is aligned with Aspire's instructional methods.
- Program is in alignment with strategies and priorities.
- Data is seamless with Aspire's other data.

ECONOMICS (How do the economics make blended learning an attractive option for Aspire?)

- Program shows potential for savings over time.
- Hardware costs do not extend beyond current budgets or fundraising capabilities.
- Software costs do not extend beyond current budgets or fundraising capabilities.
- Training costs are built into software costs or current professional development budgets.
- Information technology (IT) support costs do not extend beyond current budgets or fundraising capabilities.

STUDENT-TEACHER IMPACT (What needs to be happening in the classroom for us to deem this a success?)

- State of classroom management is tight so that students on computers are 100% on task the whole time, and 100% of students receiving direct instruction are on task.
- 100% of students are engaged while online.
- 80% of students demonstrate engagement online outside of class.
- Teacher checks and uses student data weekly.
- Teacher demonstrates strong confidence in using and supporting the program.
- Student achievement goes up as a result of online performance.
- Pilot shows potential for increased student load or class size because all items above meet or exceed.
- Pilot does all of this without burning out teachers and ideally makes it easier for teachers to teach.

FEASIBILITY (How much do we have to change to make implementation a reality?)

- Steps to implementation and teams involved require minimal impact on existing processes and teams.
- Tech requirements (bandwidth, support, wiring of rooms) are achievable with minimal impact or costs for IT services.
- Facilities requirements (classroom space, storage of tech) are minimal given existing facilities.
- Impact on other classes is minimal given existing master schedule.
- Impact on Aspire as a whole is minimal given existing processes and teams.

GO FOR THE BADGE!

Determined Decision Maker

- Gather your leadership team and identify what instructional problem you want to "hire" technology to help you solve.
  - Describe the problem you want to focus on solving.
  - Identify a measurable outcome with a specific goal that you want to achieve.
- Check your instructional problem against relevant student achievement and teacher data to ensure your problem is aligned with your actual needs.
- Ask yourself and your team the question: Can your instructional problem be better solved in another way that does not involve technology? If so, critically question your choice of problem, and if necessary, revise the problem on which you plan to focus your efforts.
- Document your problem to analyze and reflect on it so your team doesn't lose sight of it during the process.
- Commit to piloting so that you can learn from low-impact mistakes before you scale across a school.