Hello Education Adventurer,

In the “good old days” of car travel, we didn’t have maps on our phones. Back then you’d go to AAA or some other travel service to get maps for your journey, hand that thick booklet to your navigator, and hit the road to places unknown.

For many of you, blended learning can also be a journey into the unknown. There are so many things to consider, so many stops along the way. Detours and discoveries are around every corner, so you need someone to help you navigate, too. As we look to the future of education, we want this guide to help you effectively combine the best of distance learning with the best of traditional classroom instruction, to produce a truly blended approach to education.

That’s why we created Blended Learning: The Guide to Your Journey. Here you’ll find research-backed insights into what you need to consider when embarking on your blended-learning journey. You’ll also find a map of stops along the way, with checklists to help make sure you don’t forget anything as you go.

Thank you for allowing us to help you on your journey into blended learning, and ultimately for helping those who matter most: your students.

Enjoy the ride,

Lisa O’Masta
President, Learning A-Z
**Why Blended Learning Works**

An evaluation of evidence-based online learning studies found that “of the 11 individual studies with significant effects favoring [online education], 9 used a blended learning approach.”

Blended learning improves the efficacy and efficiency of the entire learning process.

Blended learning ... has the proven potential to enhance both the effectiveness and efficiency of meaningful learning experiences.

Blends of online and face-to-face instruction, on average, had stronger learning outcomes than face-to-face instruction alone.

“District(s) must use technology, specifically online learning, to customize for students’ different learning needs.”

Teachers enable and inspire students to learn.

Implement Technology For Student Outcomes First

To thrive in the information economy, The Partnership for 21st Century Skills (P21) recommends that all students acquire broad, transferable cognitive and noncognitive (intrapersonal and interpersonal) skills.

80% of surveyed businesses said blended learning is “important” or “critical”

86% of surveyed teachers use digital games for English language instruction

Blended learning helps communication shift from command to conversation.

The knowledge workplace is a blended-learning environment.

57% of parents say online learning allows their children to work at their own pace.

72.7% of blended-learning schools received acceptable performance ratings. Online-only schools were 37.4%.

Sources:
- 2018 Brandon Hall Group Learning Strategy Study
- Blended learning: Uncovering Its Transformative Potential in Higher Education, D. Randy Garrison and Heather Kanuka
1. Buckle Up
This will be a long ride, with bumps, curves, and detours along the way.

2. Assemble Your Team
You’ll be on this journey for a while, so pick people you really like. Assemble a team based on the scope and complexity of your implementation. They will be there to advise, research, and take on tasks.

3. Research and Learn
Few go on a trip without first learning something about the destination. Now that you have your travel companions, start researching online to spark ideas.

4. Benefits for Students
This concept, not the technology, should be the first item you address. At the end of the school year, what specific goals will you have achieved? Use the SMART model for goals as a guide.

5. Engage Students Equitably
What does the school need to do to ensure that the blended learning model provides equitable resources for all students? What more can the school do to help? These are just a few of the questions you must answer before you can start working toward a successful implementation of blended learning.

6. Educate Teachers
This must be done within the concept of blended learning and the new opportunities blended learning creates for teachers to grow and to be satisfied in their careers.

7. Identify Other Stakeholders
Teachers, unions, principals, parents, and guardians will all need well-thought-out and customized messaging.

8. Check the Tech
Determine what type of software, hardware, and internet backbone you want to use. This can range from integrated to modular, Mac to PC and Chromebook. The choices can be dizzying so it’s okay to feel a little “carsick.”

9. Pick Your Place
Choosing exactly which kind of blended learning strategy you use will impact your technical infrastructure and physical configurations. Types can range from station rotation to virtual. We explain this later in our guide.

10. Sing the Same Song
No trip is complete without everyone singing along in the car. The same goes for implementing blended learning: Everyone has to buy in on a culture you define together. Build your team, facilitate their efforts to solve problems, and implement.

11. Implement
It’s time for the rubber to meet the road. Start small with one class or one school with a plan for growth to your district based on what you’ve learned.

12. Reminisce and Revise
It won’t be long before your journey is in the rearview mirror. But that doesn’t mean you won’t look back on it, think about things you might have missed, and decide to revisit. Evaluating and refining are an ongoing process.

13. Detour
Plan in-person visits based on available time and budget to spark ideas; blendedlearning.org has helpful resources.
How many people will use the network?

How many devices will access it?

What types of devices will access it?

What are the size and age of the building you will use?

What will usage patterns or bandwidth demands be?

How much will it cost to implement and maintain the network?

Sources:
- https://www.blendedlearning.org/directory/

TECH FOR YOUR TRAVELS

Percentages of students with devices by 2022

<table>
<thead>
<tr>
<th>Types of Devices with devices</th>
<th>2013%</th>
<th>2019%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one device per student</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>One device per student</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Two devices per student</td>
<td>38%</td>
<td></td>
</tr>
<tr>
<td>Three devices per student</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>More than three devices per student</td>
<td>5%</td>
<td></td>
</tr>
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</table>

Drivers for internet bandwidth growth

<table>
<thead>
<tr>
<th>Topics</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phishing</td>
<td>47%</td>
</tr>
<tr>
<td>Denial of service</td>
<td>18%</td>
</tr>
<tr>
<td>Ransomware</td>
<td>11%</td>
</tr>
</tbody>
</table>

Types of Devices to Consider

- Chromebooks
- iPads
- Macs
- Windows laptops/tablets

หมวดหมู่ที่ควรคิดถึงในการวิเคราะห์โปรแกรมการศึกษา

- ความสามารถในการใช้งาน
- ความสามารถในการเข้าถึง
- ความต้องการเทคโนโลยี

- การใช้งานแบบมือถือ
- ความปลอดภัย
- สถานที่สำหรับการทำงานร่วมกัน

- ระดับของอาจารย์ที่มีการสนับสนุน
- ความสัมพันธ์ของความคิดและรู้

- การประเมินแบบประเมินแบบรูปแบบการประเมิน
- ผู้ปกครองที่ต้องการแบบประเมินทางอิเล็กทรอนิกส์
- ผู้พัฒนาแบบออกแบบและงานที่มี

- การพยากรณ์การใช้การเชื่อมต่อแบบไร้สาย
  - การพยากรณ์ผู้ใช้เครือข่าย
  - การพยากรณ์วิธีการใช้เครือข่าย

- การพยากรณ์สิ่งที่จะเกิดขึ้น
  - การพยากรณ์การติดต่อ
  - การพยากรณ์การเปลี่ยนแปลงแบบยืดหยุ่น

- การพยากรณ์ที่จะเกิดขึ้น
  - การพยากรณ์การจัดการและรักษาเครือข่าย

More students with devices

Digital and streaming content

Online and embedded formative assessment

Parents demanding electronic resources

New learning models and maker spaces

Cost per Mbps

<table>
<thead>
<tr>
<th>Year</th>
<th>Cost per Mbps</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>$22.00</td>
</tr>
<tr>
<td>2019</td>
<td>$3.96</td>
</tr>
</tbody>
</table>

Tech for your travels

88% of districts use cloud-based software systems

Wireless Network Questions

- How many people will use the network?
- How many devices will access it?
- What types of devices will access it?
- What are the size and age of the building you will use?
- What will usage patterns or bandwidth demands be?
- How much will it cost to implement and maintain the network?
Blended Learning Configurations

The blended-learning environment can be arranged in various ways. Here are the pros and cons for each.

**A La Carte Model**
Students can opt to use distance learning to supplement their in-person classes.

**Pros:**
- Increases opportunities, options, and flexibility

**Cons:**
- Lack of structure can lead to disengagement

**Station Rotation**
Students rotate through stations in the classroom on fixed schedules with at least one station that is online instruction.

**Pros:**
- Smaller teacher-to-student ratio, better student engagement, lesson flexibility

**Cons:**
- Tech issues, noise

**Individual Rotation**
Students rotate through stations on an individual basis. Schedules are set by teacher or learning software.

**Pros:**
- Teachers can focus more on students with greater need, and students work at their own pace

**Cons:**
- Some students can’t stay organized, requires teachers to redefine role

**Lab Rotation**
Similar to station rotation but online instruction happens in a computer lab.

**Pros:**
- Smaller teacher-to-student ratio, student collaboration, fixed schedule

**Cons:**
- Tech issues, fixed schedule could stifle quick learners

**Flex Model**

Similar to station rotation but online instruction happens in a computer lab.

**Pros:**
- Smaller teacher-to-student ratio, student collaboration, fixed schedule

**Cons:**
- Tech issues, fixed schedule could stifle quick learners

**Enriched Virtual Model**
Most courses are completed remotely by the student. Face-to-face instruction time is required but not every day.

**Pros:**
- Combines benefits of ala carte and flipped classrooms, a good bridge between classroom and virtual-only learning

**Cons:**
- Students may not be able to juggle home and school requirements, and will need personal devices for coursework

**Flipped Classroom**
Students learn new material remotely at home. Classroom time is dedicated to practice and projects with the teacher.

**Pros:**
- Lessons can be viewed multiple times if needed, and class time focuses on lesson implementation

**Cons:**
- Little cost efficiencies, requires high level of student initiative, and dependent on student internet/bandwidth/device access at home
What gets measured gets done, which is why it’s critical to track student progress along the blended-learning journey. Here are some tips to get it done.

**Student Goal Setting**
Under the teacher’s direction, each student evaluates skills and then sets daily, weekly, monthly, quarterly, and annual goals (or a combination of those). The SMART model is often used. Teachers check in with students to monitor, encourage, and support progress. If that sounds a lot like a work environment, it’s by design.

**Develop and Track Probes**
Teachers, schools and districts can develop “probes,” or tracking data points, to monitor progress. The probes can be tracked on a spreadsheet or, better yet, automatically in learning software.

**Lean on Each Other**
We can all learn from each other’s experiences in this new, uncharted territory. Be sure to rely on the experts who live and breathe blended learning, and have deep experience in best practices. You can tap into their knowledge to ensure you’re serving your students in the best way possible.

**Survey Your Stakeholders**
Don’t forget to ask all your stakeholders for measurable input. Annual input from parents, teachers, and students will help you understand what’s working and what needs improvement.

Sources:
- https://practices.learningaccelerator.org/strategies/empowering-ownership-of-learning-through-goal-setting
- http://www.ascd.org/publications/educational-leadership/feb05/vol62/num05/How-Student-Progress-Monitoring-Improves-Instruction.aspx
- https://www.blendedlearning.org/directory/forum/question/11