Introduction to K-12 Blended Teaching

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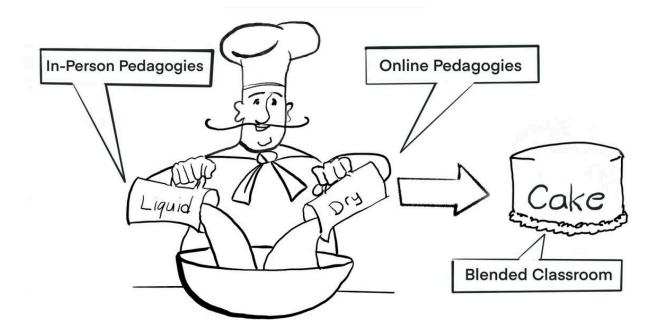
1.1 Blended Teaching

In its simplest form, blended teaching is the strategic combination of in-person teaching and online teaching.

Blended teaching is a general term that covers a wide range of different pedagogies, strategies, models, and practices. One teacher's blended classroom might look mostly like a traditional classroom with the addition of an occasional online discussion with students, while another classroom might be mostly online with a few strategically planned inperson activities.

Consider this simple (yet imperfect) analogy. Blended teaching is like baking a cake.

- The cook mixes the dry and liquid ingredients together to create a cake for friends/family to eat. The skill of the cook and the nature of the ingredients can create something uniquely wonderful.
- Likewise, a teacher 'mixes' pedagogies in online and in-person modalities together to create learning experiences/outcomes for students.



Consider possible lessons to take from the blended-cooking analogy:

- More dishes are possible with both dry and liquid ingredients.
- The specific ingredients matter. (You can't just have 2 cups of any dry ingredients and 1 cup of any liquid ingredients.)
- The amounts of specific ingredients also matter.
- When mixed well the outcome is different (often better) than if not mixed at all.
- When different ingredients are used, a different cake is made.
- Different cakes may have different purposes.
- There are thousands of ways to combine the dry and liquid ingredients.
- Good cooks do not follow a recipe. They make the cake to fit a specific purpose.

Like a good baker makes a cake, a skilled teacher can create a blend that promotes learning in a way that is most helpful for her own students.



1.2 Reasons for Blended Teaching

There are three primary reasons that teachers are motivated to try blended teaching: (1) Improved student learning, (2) Increased access and flexibility, and (3) Increased cost efficiency. Table 1 shares a few simple examples of each of these reasons for blending.

Table 1

Reasons for Blending

Reasons for Blending

Improved Student Learning	A teacher:

Reasons for Blending

- uses the blend to give students small group instruction or one-on-one time with students in order to address specific learning needs.
- uses data obtained from online tracking systems to constantly monitor learning and to make adjustments to instruction.
- · uses self-made videos to give instructions that students can slow down, speed up, pause, or repeat in order to understand the material or an assignment.
- · offers choice in assignments to increase student engagement and ownership in their learning.

Increased Access and A teacher: **Flexibility**

- uses the online space to incorporate into the classroom materials and information, targeted instruction, and activities that are not otherwise available.
- A teacher uses technology to give students choices in learning activities.
- · A teacher consults with students to make learning goals.

Increased Efficiency

A teacher:

- moves some science labs online, creating less need for expensive equipment in the classroom.
- uses books that are online to lower the cost of books (and to have more than a classroom set for students).
- uses the online space to publish assignments, teacher and student examples, writings, explanations, and questions, reducing the need for copies.
- Creates videos to expand teacher presence in the class, thus multiplying her effectiveness and productivity.

In this book we will primarily focus on providing examples of blended instruction that are designed to improve student learning and/or increase access and flexibility for the learner. It is worth noting that while one of these purposes may be the primary reason that you implement a blended approach, you may also see added benefits in other areas as well, such as in ease of lesson planning or improved overall class engagement.



1.3 Identifying Your Reason for Blending

Each teacher needs to decide their own reason for blending. This is important because, like the chef with the cake, determing your purpose provides a vision for how to select appropriate blended models and strategies to achieve the purpose. Blending just because an "administrator told you to" or because "you like technology" are not good reasons for blending.

In working with teachers, we have found that one of the best ways to get started is to identify and focus on a problem of practice. A problem of practice is a current problem or challenge that you believe blended teaching could help you solve.

As you consider problems of practice that are meaningful to your teaching context, these five pathways may help you identify them (Table 2).

Table 2

Problem of Practice Pathways

Problems of Practice Pathways

Signature Pedagogies

Signature pedagogies are the teaching strategies that are commonly used in your discipline. They are often unique to your content discipline and shared within your professional organization.

A problem of practice could recognizing and trying to address limitations in your implementation of one or more signature pedagogies in your discipline.

Examples:

- Language Arts: I want to find more effective ways to engage my students in collaborative writing.
- Math: I want to increase the quality of mathematical discourse in my classroom.
- **Science:** I want to create opportunities for my students to use technology to analyze and interpret data and then create a scientific argument from this evidence.

Social Emotional Learning

Students may struggle in areas of social emotional learning, such as self-management, self-awareness, responsible decision making, social awareness, and relationship skills.

A problem of practice could be recognizing and addressing areas of growth in students' social and emotional learning.

Examples:

- I want to create structures to help my students to make rational decisions.
- I want my students to engage in activities that help them develop empathy for each other.
- I want to introduce self-regulation challenges into my students' assignments.

6 C's of Deep Learning

The 6 Cs of Deep Learning are character, citizenship, collaboration, communication, creativity, and critical thinking.

A problem of practice could entail trying to increase one or more of these C's in your instruction.

Examples:

- I want to increase my students' ability to communicate effectively about their learning.
- I want to help my students develop better collaboration skills.
- I want to students to think critically about current world events.
- i want to allow my students to demonstrate their learning in creative ways.
- I want to help my students practice appropreate digital citizenship.
- I want my students to develp good character as they prepare to enter the real world.

7 P's of Quality Blended Teaching

The 7 Ps of Quality Blended Teaching are participation, pacing, personalization, place, personal interaction, preparation, and practice with feedback

A problem of practice could be recognizing and addressing a challenge in one of these areas.

Examples:

Problems of Practice Pathways

- I want to enable 100% participation in class discussions.
- I want my students to pace themselves to learn as quickly as they are able or as slowly as they need to.
- I want my students to personalize their learning by selecting learning activities that will help them the most.
- I want to open up learning experiences that take place outside of my classroom.
- I want to create additional opportunities for students to personally interact with me and with one another.
- I want to increase students' out-of-class preparation before classroom activities.
- I want my students to recive timely, effective feedback to their practice.

Student Access

Students may have challenges with access to traditional learning opportunities because of disabilities, illness, and/or participation in extracurricular activities like sports or the arts. They may also have limited access to materials that are necessary for improving their understanding of the subject. Such materials may include books, primary resources, lab equipment and resources, art supplies, concert or theatrical performances, etc.

A problem of practice could try to address challenges of access for students in your class.

Examples:

- **Student Absence from Class:** I want to make it easy for students who miss class for illness or extra curricular activities to stay caught up.
- **Transient Students:** I want to make it possible for students who move between schools regularly to quickly assess what they know and do what is needed to participate with the class.
- **Resources:** I want students to have access to the educational materials used as part of our learning in class.



1.4 Examples of Problems of Practice

Here are some examples of teachers who used blended teaching to solve a problem of practice. As you read through them, see if some resonate with desires you have for your classroom.

Scenario 1

Problem of Practice: A teacher wants students to take more ownership for their educational practices and attitudes.

Blended Approach: Students set weekly and daily goals which are recorded online, where the teacher has immediate access to them. Goals can include completion goals (setting a certain number of assignments and assessments to complete), performance goals (setting a specific standard of how well the assignments are done), or a mindset goal (setting a goal for asking for help or focusing better), for example. Students share their goals with their team and teacher online. At the end of the week, they reflect online about their experience. The teacher can respond online or inperson to areas of concern as needed.

Setting: LPS (Leadership Public Schools) Richmond in Richmond, CA

Site: Daily and Weekly Goal Setting

Scenario 2

Problem of Practice: A chemistry teacher wants his students to "learn for themselves and by themselves."

Blended Approach: The teacher employs a flipped classroom. He creates videos of content the students need to know as well as tutorials on how to do certain chemistry operations. The students watch these videos at home. In class, the students apply what they learn at home in a variety of activities. The teacher walks around the class, answering questions, giving guidance, tutoring as needed, and "putting out fires."

Setting: Woodland Park High, Colorado

Site: Flipped Chemistry Course

Scenario 3

Problem of Practice: A writing teacher wants her students to receive immediate feedback and to value the writing and feedback processes.

Blended Approach: The teacher has students write a specific type of paragraph online in a shareable document. While the students write, the teacher opens the students' documents on her computer and gives feedback on them. Later the teacher and students discuss how to give good feedback. The students are then paired with another student to give each other online feedback. The teacher chooses five feedback comments and shares them in an in-person whole class discussion about the strengths and weaknesses of the feedback comments.

Site: Learning to Give Feedback

Scenario 4

Problem of Practice: A middle school teacher wants parents to be better informed and involved in their child's education.

Blended Approach: Students use an app called Seesaw to record their work. Anything recorded on Seesaw is immediately available to parents who are connected to their child's profile. Students can add video and audio components to explain their work.

Setting: Trailblazer Elementary School in Colorado Springs, CO

Site: Seesaw Record

Scenario 5

Problem of Practice: Students hurry through math assignments without really learning how to approach math problems and do them correctly.

Blended Approach: Students have individualized online learning agendas with standards, instructional videos, and text exercises. Students check off each objective within a standard as they complete them and pass an online mastery quiz. Teachers use the agendas to track student progress. When the students have finished each objective, the teacher reviews the progress and assigns them to create a mastery video, in which the students show how they work an easy, medium, and difficult problem within the standard. Teachers review the video to determine if the student is ready for the final mastery assessment.

Setting: ReNEW DTA, a charter school for pre-K through 8th grade in New Orleans, LA.

Site: Thinking Mathematically

Creatively addressing problems of practice with a blended approach can transform your classroom and help you create a strong, effective learning environment.



1.5 Pedagogy Centered, Technology Supported

The power of the blend is that it opens a whole new set of pedagogical possibilities for teachers. Although blends can improve outcomes for students, they can also make things worse for them. As with traditional teaching, the teacher's strategic planning and skill will make all the difference in the quality of the blend.

One way to begin thinking strategically about a blend is to consider the 3 M's-media, modality, and method.

Definitions: Media, Modality, Method

Media: The physical tools or technology used in the classroom. They can be digital media, such as tablets, computers, or cameras, or they can be non-digital, such as whiteboards, books, or science equipment.

Modality: The environment, where learning takes place. Modalities are generally the in-person classroom, the online classroom, and the blended classroom.

Method: The strategies and pedagogies of the teacher. They may be general methods (such as discussions) or discipline specific pedagogies such as experimental labs in chemistry.

See Media, Modality, and Methods video for a more full explanation.

Although all three M's impact learning, they are not equal in importance. No media or modality will be effective if it is not used as part of meaningful and strategic methods or pedagogies. Modality and media have an indirect effect on learning outcomes because they influence the *types* of strategies and methods that a teacher can use. But the teacher's methods directly influence student learning and outcomes. Table 3 shows good and bad examples of blended learning strategies and pedagogies. Evaluate each and see what made the difference: media, modality, or method.

Table 3Good and Poor Examples of Blended Learning

Good Example of Blended Learning	Poor Example of Blended Learning
A math teacher uses adaptive software. She allows students to progress at their own pace and has one-on-one or small group sessions for students who struggle with a particular concept.	A math teacher has students who finish their math assignment early uses apps on a classroom set of tablets to play math games.
A history teacher sends students links to two different viewpoints of a historical event. Students read/watch the content at home. In class, the teacher puts students in groups of four and has them summarize each viewpoint and discuss why they are different. How does the creator's viewpoint affect the depiction of what happened? How can people really know what happened and why?	A history teacher records a lecture and has students view it before class at home. In class they do a worksheet with questions about the lecture.
A foreign language teacher utilizes station rotations in his classroom. At one station students choose from a list of writing assignments and write using google docs. Another student at that station reads the document online and gives suggestions or asks questions.	A foreign language teacher uses a video streaming service to show his students a weekly video in the target language. This enhances listening skills and allows

Good Example of Blended Learning

Poor Example of Blended Learning

At the next rotation students meet online with a native speaker and have a short conversation, which uses new vocabulary.

students to hear the language spoken by native speakers.

Finally, at the last station students meet with the teacher to discuss and practice new grammar rules and language structure.

These examples illustrate that blended teaching is powerful only when the modality and the media are used to support, not replace, pedagogy or method. As in any teaching setting, good blended teaching does not depend on technology but on the teachers' understanding of her students, her knowledge of the content, and her ability to plan strategies that will use technology to meaningfully combine online and in-person spaces, increase the number and quality of student interactions, use data to effectively meet students' needs, and personalize instruction in order to increase student ownership of their education, their engagement, and their ability to develop and use 21st century skills.

The chapters in this book will help you get started.

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