

Blended Learning

in Grades 4–12

Leveraging the
Power of Technology
to Create
STUDENT-CENTERED
Classrooms

Catlin R. Tucker



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The 21st Century Classroom

The addition of technology does not necessarily equate to a 21st century classroom; however, technology can be the vehicle used to hook student interest and develop relevant skills needed to be successful beyond school. As the job market changes and the demand for technologically savvy workers grows, providing students with the ability to understand and use key technology tools in school is becoming critical. Currently, 50% of today's jobs require technology skills and that number is expected to grow to 77% in the next 10 years (Arnold Group, 2011). When students leave high school, they enter an increasingly digital world. A growing number of jobs will require that applicants know how to work remotely, dialogue online with coworkers, work collaboratively using tools like Google Docs and wikis, and communicate via e-mail, Skype, and Twitter. The globalization of the workplace requires a skill set that many students are not taught in school. In fact, the absence of technology in school creates a disconnect between the students' lives outside of the classroom, which are often saturated in technology, and the learning taking place inside the classroom.

A survey conducted in May 2011 found that 94% of students believe learning and mastering technology will improve their educational and career opportunities; however, just 39% say their high

school is currently meeting their technology expectations (CDW, 2011). If students see the value in learning how to use technology effectively, then teachers can create buy-in and gain student interest if they teach these skills in parallel with their existing subject matter.

Crossing the Digital Divide

For those teachers and schools lucky enough to have the funding for iPads, 1-to-1 computer programs, and video cameras, this new digital frontier in education has been easier to explore. But for the vast majority of teachers, myself included, the digital divide and inequities in access require them to be innovative and resourceful if they want to use technology.

That said, I do not think lack of access can be an excuse not to incorporate technology into our teaching. If teachers are not providing students with opportunities to engage in conversations online, work with media to enhance communication, and learn to express themselves digitally, then we are not truly preparing them with the skill set needed for life beyond high school.

Teachers always ask me, “What do you do if a kid doesn’t have access to technology?” Ironically, this question is often asked at an education technology conference where the goal is successful integration of technology. My answer: “Find them access.” Libraries, on campus or in the community, are often a resource for computers and Internet connections. Friends or family may have computers students can use. A report by the Pew Internet and American Life Project “reveals that 93% of teens ages 12–17 go online” either at home, at school, or at the local library (Pew Research Center, 2012, para. 1). Those students without computers and/or reliable Internet access at home—a hurdle for many rural communities—are already disenfranchised. If we do not find a way to get them online and teach them to use technology effectively, they will remain disenfranchised.

We are at a breaking point where students who do not have access are not being served by the system. A press release from the Arnold Group (2011) states,

In the U.S., approximately 9.5 million students are digitally excluded outside of their schools. According to the Federal Reserve, these students have a high school graduation rate six to eight points lower than those who have home access to the Internet. (para. 4)

In my opinion, this is quickly developing into the next civil rights issue. Those families without access to technology and/or the Internet are not privy to huge amounts of information, basic services, and countless opportunities. We have to find a way to empower students with technology regardless of their socioeconomic status.

The number of students with access should significantly increase as programs like the \$4 billion public-private partnership announced by the Federal Communications Commission (FCC) in November 2011 are implemented. The FCC plans to make “high-speed Internet access and computers more affordable for more than 25 million mainly low-income Americans” (Vaughn, 2011, para. 1). Low-income families that qualify will be able to get Internet for \$9.95 per month and refurbished computers for \$150, which has the potential to have a huge impact on access to technology in lower socioeconomic areas.

Developing 21st Century Skills Is Critical to Future Success

The skills and knowledge needed to be successful today are different from those needed 50, 20, or even 10 years ago. As the global marketplace rapidly evolves, the landscape of education must also evolve to adequately prepare students for life beyond secondary school. Companies want students who

- possess creativity,
- communicate effectively,
- think critically,
- solve problems and find creative solutions,
- work collaboratively,
- leverage technology successfully,
- demonstrate the ability to be innovative.

To learn, practice, and master these skills, students must be put at the center of learning. This is why I emphasize the importance of a *student-centered classroom* throughout this book. Students cannot be passive observers if they are to learn 21st century skills; rather, they must be active participants in the learning process. They must be challenged with real-life situations and problems. They need to learn to work with their peers collaboratively and communicate effectively to find creative solutions. Today’s students will enter a rapidly changing world that will require them to think fast and use their

peers as resources. This will be much easier to do if they have been enthusiastic participants in their education.

Technology provides the time and flexibility needed to shift from the traditional model of instruction, where the teacher stands at the front of the classroom disseminating information, to a more collaborative model, which values each voice in the classroom as an important component in the collective learning process.

As Andrew Churches (2009) discusses in *Bloom's Digital Taxonomy*, "an increasing influence on learning is the impact of collaboration in its various forms. These are often facilitated by digital media and are increasingly a feature of our digital classrooms" (p. 3). This digital media allows all ideas to be shared and voices heard, which is critical for true collaboration. Effective communication is essential for students to work successfully with others on an intellectual task to create or produce something. The variety of barriers that impede discussion in the classroom—discussion dominators, shy or anxious students, lack of time needed to process, not enough time to hear all contributions—are eliminated when discussions take place, in part, online. The value of discussion as a critical component to learning is emphasized throughout this book and discussed specifically in Chapter 2.

Teachers who incorporate collaborative tools into their teaching by using learning platforms (discussed in Chapter 3), discussion boards, wikis, or blogs provide students with critical exposure to new technology and support the cultivation of collaboration and communication skills. Although collaboration is often mentioned as an increasingly important skill, many students do not feel they are being given academic opportunities to develop this ability. In a survey of high school students, 59% of students said they use technology to communicate with other students, but just 23% said they use it to collaborate with other students. Many students communicate informally on social networking sites, but it is necessary to teach them how to communicate respectfully, supportively, and substantively online to collaborate effectively on academic tasks. Chapter 5 provides resources to aid teachers in making their expectations for communication clear and provides strategies for teaching students how to contribute to a conversation in a meaningful way. Once students have learned how to communicate online, then they can begin to collaborate effectively.

Technology can provide equity of voice and engage students in more complex tasks that require time, communication, and collaboration. As I began to plan my in-class lessons to complement the work done online, I was able to prioritize these skills and design creative activities that required students to think critically, problem solve,

demonstrate intellectual agility, take initiative, communicate both orally and in writing, and collaborate. The integration of online work into my curriculum allowed me the time and flexibility to create a more student-centered classroom.

What Does the 21st Century Classroom Look Like?

The traditional classroom is usually set up with rows of desks facing a board at the front of the room. Students have pen and paper ready to take notes as the teacher lectures and projects information onto the board. In this classroom the information flows from the teacher to the students. The teacher stands at the front of the room with all students facing him or her. Students are asked to sit quietly and refrain from talking to one another for most of the period. Cell phones and other wireless devices are turned off and stored in backpacks where they will not distract from the learning.

In his article “Create! Communicate! Collaborate! The 21st-Century Learner Is Here—Is Your Classroom Ready?” Mark Stevens (2011) remarks,

The typical physical building where all learning takes place has remained largely the same over the last 100 years. We live with the reality that the same structures of brick, mortar, and steel will continue to greet us each morning. The great news is that 21st-century learning can take place in every school. (para. 2)

He stresses that the learning environments are transformed into 21st century classrooms not by the addition of gadgets, but rather by educators “employing today’s technologies to make material accessible and engaging.”

In contrast to the traditional teacher-centered classrooms of the past, the 21st century classroom is student centered, prioritizing student interaction, communication, and collaboration. Students must face each other to work effectively. Instead of the teacher projecting information, students use wireless devices to conduct research and discuss the information they find. Use of wireless devices is encouraged to ensure that students learn how to use the technology for academic purposes. This classroom may appear more hectic as students have conversations and move around to work together. The

flow of information in this classroom bounces from student to student, teacher to student, and student to teacher. The collective potential of the group is valued and leveraged, making it possible to create a student-centered learning experience.

Student-Centered Classroom

Student-centered learning

is broadly based on constructivism as a theory of learning, which is built on the idea that learners must construct and reconstruct knowledge in order to learn effectively, with learning being most effective when, as part of an activity, the learner experiences constructing a meaningful product. (Attard, Di Iorio, Geven, & Santa, 2010, p. 2)

This approach to learning is grounded in the following principles:

- Students must play an active instead of a passive role in learning.
- “Deep learning and understanding” (p. 2) must be valued and emphasized, thus quality must be paramount to quantity.
- Students must have an increased “responsibility and accountability” in the learning process.
- Learners should develop an “increased sense of autonomy” (p. 2) and independence. “Choice is central to effective learning” (p. 3).
- Curriculum should be customized and differentiated to better meet the needs of all students. The one-size-fits-all approach does not work.
- Teachers must honor different learning styles and appeal to student interests to effectively engage them.
- Teachers and students must rely on one another, and their relationship must be based on mutual respect.
- Teachers and students must take time to reflect on the teaching and learning process.

Within this model, students enjoy more freedom and control over the direction of their learning. As a result students feel their voices and contributions are valued, they are motivated to play a more active role in their education, and they feel empowered by their learning.

As Dr. Richard Felder (n.d.), from North Carolina State University, states, “Student-centered teaching methods shift the focus of activity

from the teacher to the learners. These methods include active learning, in which students solve problems, answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during class" (para. 2).

Student-centered instruction in the physical classroom can build naturally on the work done online if educators use the online space to create a community of inquiry. The community-of-inquiry framework, much like the student-centered approach, values active and cooperative learning that requires students to engage with the curriculum. They are encouraged to question, work together, and problem solve. To cultivate these skills educators must shift from a lecture-based approach, which is teacher centered, to an inquiry model that is student centered. A more in-depth explanation of the community of inquiry as it relates to online communities is included in Chapter 2.

The student-centered classroom is one in which students regularly engage with their peers in collaborative inquiry-based activities and assignments. As Leo Jones (2007), from Cambridge University, states, "In a student-centered class, students don't depend on their teacher all the time, waiting for instructions, words of approval, correction, advice, or praise"; instead they "value each other's contributions; they cooperate, learn from each other, and help each other" (p. 2). Students work in groups, in pairs, or alone in this type of classroom, depending on the assignment and the learning outcomes.

Although teachers play a critical role in both the traditional and the student-centered classroom, the skill sets required by each are different. The teacher in a student-centered classroom acts as a facilitator who is "responsible for helping students work independently, monitoring them while they're working together and giving them feedback afterward" (Jones, 2007, p. 25). Letting go and allowing students to work together can be challenging. It requires patience as students learn to see each other as resources, but it helps them build confidence in their ability to tackle problems together. Students become empowered when they are able to drive their own learning, and the outcomes are much more meaningful.

This book focuses on highlighting the ways that integrating technology into the traditional curriculum can create more opportunities to engage students more actively, creating a student-centered classroom.

Chapter Summary

The world is rapidly changing, and technology is quickly permeating most facets of life. Students today must leave school with the 21st

century skills needed to be successful beyond the classroom. These skills are more easily taught when teachers integrate technology that supports communication and collaboration. It can be challenging to teach these skills in a classroom with 30 or more students. The lack of equity in their contributions and limited amount of time are just two impediments to engaging students in dynamic discussions and collaborative group work. However, teachers who adopt collaborative technology and use it to complement their existing curriculum can provide the time and space to engage students in more meaningful assignments.

Technology can make it possible for teachers to shift the flow of information in a classroom to create a student-centered classroom that requires students to take a more active role in their education. The student-centered classroom is one characterized by increased engagement, student responsibility, respectful communication, and effective collaboration. In this classroom, teachers serve as facilitators.

The goal of this book is to help teachers effectively integrate collaborative online tools that support dynamic discussions and group work, thus creating a student-centered experience both in the classroom and online.

Book Study Questions

1. What role do you think technology should play in education? How can technology add to and/or distract from learning? Do you think schools today are effectively preparing students for college and careers?
2. What technology do you or the teachers in your district currently use with students? What are the benefits of this technology? What challenges have you encountered? What skills are your students developing as a result of using this technology?
3. How do you define 21st century skills? What qualities or abilities would you add to the list provided in this chapter? What role should technology play in cultivating these skills?
4. What issues related to access do you face at your school or in your district? How can you overcome these obstacles to ensure students have access to technology? Are there computer labs on campus or at local libraries that students can use?
5. How can lack of access disenfranchise students and their families in your community? Will the public-private partnerships

- offering computers and Internet to low-income families help your students? How can you raise awareness at your school or in your community about these opportunities?
6. Why are communication and collaboration so important to learning? How do you currently teach these skills? How can you use technology to provide more opportunities to develop these skills? In addition to work in the classroom, why is teaching online communication and collaboration important?
 7. How is your room set up? Is it easy to facilitate group work in your physical space? What changes could you make in your physical classroom to encourage more communication and collaboration? What is your policy on mobile devices?
 8. Is your classroom teacher centered, student centered, or a combination? What are the benefits and challenges of each model? How can using technology create more opportunities for you to shift away from the traditional paradigm to engage students more actively in the learning process?

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Blended Learning

What Is Blended Learning?

The term *blended learning* is shrouded in mystery because it refers to a relatively new approach to instruction that has been implemented in a variety of ways in a myriad of educational settings.

Blended learning weaves various instructional mediums into a cohesive whole. This broad, amorphous term refers to the spectrum of teaching modes that combine traditional face-to-face instruction with an online component. This integrated approach to teaching has been borne of both necessity and increased access to technology.

The necessity for a better solution to the growing education crisis in the United States is leading many educators and institutions to this hybrid style of instruction. Growing class sizes, dwindling resources, and increasing pressure to teach to high-stakes standardized exams are causing many teachers to feel overwhelmed and disillusioned with the teaching profession. The demand placed on teachers to do more with less has led many to embrace this new model of instruction.

Many school districts faced with drastic budget cuts have implemented this hybrid model to service more students while saving money on maintaining brick-and-mortar schools that are expensive to run 5 days a week, 10 months a year.

In Florida, e-learning labs are emerging that rely on computers to teach curriculum in a lab with only a facilitator or paraprofessional

monitoring students' progress. These facilitators are not trained in the subject area and are present only to monitor behavior and deal with computer issues. Currently, there are "7,000 students in Miami–Dade County Public Schools enrolled in a program in which core subjects are taken in classrooms with no teacher" (Herrera, 2011, para. 3). These learning labs are one example of how school districts are using technology to deal with class size mandates. However, many teachers resist this move toward online learning because they feel it devalues the role of the teacher as an integral part of the learning process.

Teachers can, however, play an active role in deciding how and to what extent computers, technology, and online education platforms integrate with their current curriculum. It is my belief that the teachers who embrace rather than resist technology can have an influential voice in deciding how it is blended into the educational setting as this trend continues.

Blended learning provides teachers and students with flexibility. Teachers can design lessons that weave the best of traditional instruction with the unique benefits of an online component to achieve optimal learning outcomes for all students. This frees teachers from the perpetual race against the bell. Instead of jamming huge amounts of curriculum into one class period, teachers can complement their in-class instruction with an online component to make work done at home more meaningful. Lessons can begin in class and continue online and vice versa. The trick for the instructor is to weave these two instructional mediums together. The topic of weaving will be discussed further in Chapter 3.

The blended learning model is malleable, allowing individual instructors to shape how it complements their curriculum. Teachers can tailor this model of instruction to best meet their students' diverse needs. For example, students who often feel anxious or shy about speaking in front of peers can benefit from asynchronous—occurring at different times—online discussions, activities, and group work. This provides time for students to consider a question or topic, articulate a response, and read the responses posted by their peers. For many students this gives them an equal voice in discussions without feeling the pressure to speak in front of the entire class in real time.

Many schools have found that providing students with information online—especially now that digital texts and resources are more readily available—and then using face-to-face interactions to discuss that information and work in collaborative groups to apply the information is a better use of class time.

The online component of a blended learning model can support a wide range of student-driven projects and assignments that are often neglected in traditional classrooms due to time constraints and a general lack of student focus. Involvement in a project can take place asynchronously online, allowing students to participate in a time and space that is convenient and comfortable for them.

The second factor leading to this trend in education is the proliferation of technology in our society and the mastery of this technology by students. Even teachers with limited technology in their classrooms can harness and leverage the mobile technology brought into the classroom by their students to create a blended learning environment.

In the 2011 *CDW-G 21st Century Classroom Report*, a survey found that 86% of students said they use technology more outside of the classroom than in class and 94% of students said they use technology to study or work on class assignments at home (CDW, 2011). These numbers sharply contrast with the 46% of faculty who said they regularly assign homework that requires the use of technology. According to this survey conducted in May 2011, the vast majority of students are using technology at home for academic purposes; however, students are electing to use much of this technology on their own. Students recognize the value of technology to succeed in school, and the majority have access, which means teachers can use that access to design homework that extends beyond traditional pen-and-paper assignments to engage a growing number of technologically savvy students.

As budgets shrink and workloads increase, blended learning offers teachers the opportunity to break the traditional mold and create a hybrid learning environment that fosters collaboration, provides much-needed flexibility, and prioritizes student-centered instruction.

Six Common Blended Learning Models Currently in Use

In *The Rise of K–12 Blended Learning*, Michael B. Horn and Heather Staker (n.d.) discuss the six most common blended learning models currently in use. Here is a brief description of them:

1. *Face-to-Face Driver*. The teacher still delivers the majority of curriculum. The online learning element is used on a “case-by-case basis to supplement or remediate, often in the back of the

- classroom or in a technology lab” (p. 4). This model is quickly evolving beyond remediation to allow teachers to integrate Web 2.0 technology to more fully engage students in online discussions, activities, and projects beyond the physical classroom.
2. *Rotation*. As the name suggests, this model rotates on a fixed schedule between learning online and learning in the classroom. This blends self-paced work online with face-to-face instruction. In this model, the “face-to-face teacher usually oversees the online work” (p. 4).
 3. *Flex*. This model relies on “an online platform that delivers most of the curricula” (p. 4). Tutorial sessions or small-group instruction with teachers can be incorporated to allow time for students to access instructors, but the majority of work is done virtually. This model is used in “many dropout-recovery and credit-recovery blended programs” (p. 4).
 4. *Online Lab*. Learning takes place on a school campus in a computer lab. Online teachers deliver curriculum via an online learning platform. These computer labs are monitored by paraprofessionals who are not trained in the subject area, but rather are present to deal with discipline or technology issues. Many students taking an online lab class will “also take traditional courses and have typical block schedules” (p. 5).
 5. *Self-Blend*. This model “encompasses any time students choose to take one or more courses online to supplement their traditional school’s catalog” (p. 6). The online learning element is always completely remote, not in an on-campus lab. Students decide on the combination of traditional classes and online classes in this model.
 6. *Online Driver*. Both the online learning platform and the traditional teacher deliver content. The majority of work is done remotely, but face-to-face meetings with an instructor are incorporated as either an optional or required element depending on the program.

Emerging Blended Learning Model: Teacher-Designed Blend

This book focuses on an emerging variation of the Face-to-Face model that I call the Teacher-Designed Blend, which still values the

teacher as the primary deliverer of content and designer of curriculum. However, in this spin on Model 1, online work expands beyond remediation or credit makeup to better serve all students. An online learning platform is integrated into the traditional curriculum to complement in-class work. The online learning platform can be used to support discussions related to curriculum, introduce multimedia, and facilitate student-driven projects.

The Teacher-Designed Blend offers teachers control over their curriculum and delivery, while still providing students with an online component that is more flexible and offers true opportunities for dynamic discussion and collaboration with peers. The ultimate goal of a blended learning class should be twofold: (1) allow the teacher to continue working directly with students and (2) use an online component to develop a learning community that works together to discover knowledge.

Growing online courses and virtual classrooms contribute to an atmosphere of skepticism and fear among seasoned educators who have spent years perfecting their craft. They fear that the use of technology diminishes their role and devalues the actual presence of the teacher.

The effectiveness of online courses and distance learning has been questioned, but research suggests that they can be successful for independent, motivated, and self-disciplined students. The flexibility of these courses make them attractive, but they do require students to push themselves to make the most of the experience. It does not necessarily work as well for students who are less mature, motivated, and disciplined. For them, we still need teachers to provide the necessary inspiration and structure.

The Teacher-Designed Blend is a logical alternative to online and distance courses only, or to in-class instruction only. It supplements traditional classroom instruction but does not replace it, giving both teachers and students the best of both worlds.

Ask students why they love a particular class. Chances are they will mention a teacher they connected with, who inspired them, or a teacher who explained the subject so they “got it,” or understood what the teacher was trying to communicate. Teachers add experience, expertise, personality, compassion, and variety to a class in a way that a computer alone never could. Unlike online courses, the blended learning model values the teacher’s face-to-face interactions with students as crucial to the success of the course.

Teaching is evolving, and technology is an important part of that evolution. Students deserve to learn using the technology they will inevitably encounter when they enter college and/or the workforce.

It is important today that teachers teach digital literacy, digital writing, and virtual citizenship in conjunction with traditional subject matter.

Although the ideas and strategies presented in this book can be applied to a variety of blended learning scenarios, this book focuses on the Teacher-Designed Blend. The goal is to empower teachers with the knowledge and resources needed to integrate technology and online tools to be more effective and engage more students to improve learning.

10 Benefits of a Blended Learning Model

1. Save Time

Teachers spend hours each week creating, copying, collating, stapling, and hole-punching handouts, assignments, and activity sheets for students. Much of this time is eliminated when a teacher transitions to an online education platform where handouts can be uploaded and attached to questions, topics, and assignment descriptions.

2. Save Money

Copy machines, ink, paper, and repairs cost school districts thousands of dollars annually (monthly for some larger districts). Most school sites spend five to nine cents per copy. My school district currently spends seven cents a copy, which means one handout for each of my 164 students costs \$11.50.

In less fortunate districts, teachers are forced to spend hundreds—if not thousands—of dollars of their own money to supplement classroom resources.

Teachers can save money and paper by posting assignments, directions, notes, and reading materials online. This also helps “organizationally challenged” students who tend to lose or misplace everything handed to them. All information is in one easily accessed place.

3. Spend Less Time Grading

Online work frees teachers from their role as the only source of information and feedback. When students engage in dynamic online discussions and collaborative group work, they become valued resources in the class. They ask each other clarifying questions,

compliment strong ideas, provide suggestions for improvement, and offer alternative perspectives. This also allows for improved student engagement and immediate peer feedback.

It is easy to eliminate worksheets that have limited potential to inspire, when students are actively participating in dynamic online discussions related to the curriculum.

4. Spend More Time in Class Doing What You Love

With less time spent in copy centers and grading paperwork, teachers can focus on designing innovative learning opportunities that employ the nearly limitless resources available on the Internet. The classroom can become a more student-centered environment because there is less pressure to cover all the content in the physical classroom. The online space can be used to introduce information and give students a place to have conversations about that information. This allows more flexibility in the classroom because students can spend more time working in collaborative groups to do creative tasks related to the subject matter.

5. Increase One-on-One Interactions With Students

Teachers can use online tools to engage in conversations with students that they may not normally have. Some students are shy or anxious about speaking with a teacher in class; online discussions give students easy access to one another and the teacher. They can post questions and get answers outside the confines of a normal school day, in a setting familiar to them.

6. Give Students Opportunities to Practice Standardized Exams Online

Most teachers do not want to spend valuable in-class time drilling students on standardized exam questions. Teachers recognize test preparation as necessary in this era of high-stakes standardized exams, but most can't afford to spend precious class time on test preparation activities. Instead, they can use collaborative online learning platforms to facilitate test practice for students. Doing so provides a space for them to work together to develop stronger test-taking strategies and skills.

7. Facilitate Group Work That Works

Any teacher who has facilitated a group work assignment in class knows the frustration of time wasted. Online collaborative group work gives students the flexibility to participate asynchronously when they have time, and it eliminates wasted time in class. Technology also creates transparency because it is easier to see who has done what, making the work online more equitable.

8. Communicate More Effectively With All Students

Many learning platforms have built-in message systems that make it possible for teachers to communicate with individual students or groups of students easily. Teachers can make announcements, amend assignments, change due dates, and address questions using the message option—without having to wait until the next school day.

Teachers who are inclined can also arrange virtual office hours using Skype, Google+ Hangout, or other real-time chat tools to support students outside the classroom.

9. Build Community and Relationships

Teachers can use the online space to build student relationships. Online icebreakers are a great way to get students talking, using each other's names and practicing online etiquette. These fun informal conversations translate into a stronger in-class community. This is one of the blended learning benefits that I personally have experienced, much to my satisfaction and delight. Chapter 5 introduces a variety of online icebreakers that are compatible with online learning platforms.

10. Have Fun

The Internet gives teachers access to more information than ever before. Most learning platforms allow teachers to embed pictures, videos, PDFs, and other documents, making it easy to take the best online resources and present them in the safe space of your online learning platform.

Discussions Are Critical to a Successful Blended Learning Model

My belief that discussions play a vital role in the learning process is well grounded and shared by leading experts in the academic

community. Discussion becomes even more important when students are working remotely for any portion of their learning. Students who complete work at home via computer can be extremely isolated; however, the online space provides many opportunities for students to connect and talk. Learning to capitalize on the social nature of students using social media and online discussion tools is critical to maximizing the effectiveness of a blended learning model. To be superior or comparable to the traditional teaching model, blended learning must engage students and provide interactions that exceed those possible in the physical classroom.

In *The Importance of Conversation in Learning and the Value of Web-Based Discussion Tools*, Heidi Elmendorf and John Ottenhoff (2009) stress the importance of discussion as an essential part of the learning process:

We know, usually on an intuitive level, how social dialogue can allow students to explore the shape of knowledge and its construction, ask questions and experiment with answers, and build complexity from a broadened foundation of perspectives contributed by their peers. (para. 4)

The act of telling or explaining what they know cements students' understanding of concepts. Conversely, students who are struggling benefit from hearing their peers' ideas, opinions, and explanations. Even the opportunity to ask questions can help students begin to deconstruct challenging ideas or concepts.

The old adage that "there is no such thing as a dumb question" applies absolutely. Hammering home the idea that all questions are welcomed and encouraged will make students less reticent about asking for clarification on points they do not understand. Doing so in a safe Internet space, where they don't have to worry about negative nonverbal cues or fear feeling foolish in front of a whole class, makes it even easier.

I wholeheartedly believe that the potential of the group far exceeds the intellect of any one individual in the classroom—myself included. Despite my passionate belief that discussions are an integral part of the learning process, I repeatedly failed at generating successful discussions in class. The same four or five students dominated discussions, while the rest of the class sunk low in their chairs, avoiding eye contact.

Even though most teachers believe in the value of discussion, it is often neglected in the classroom. There are a variety of impediments to real-time discussions that exclude the majority of students from participating. This lack of equity in face-to-face discussions creates an imbalance that can be corrected when discussions take place

asynchronously online. This asynchronous environment provides something in-class discussion can't: *time*.

Most students need time to process information before responding to a question. Yet in traditional classrooms, time is a luxury most teachers do not have. With pressure to close the achievement gap, differentiate instruction, raise test scores, and prepare kids for college, discussions seem extravagant and time consuming.

In "Effective Classroom Discussions," Selma Wassermann (2010) describes the common teacher experience:

So much to be done! So little time! The pressure on teachers to get everything done by the end of the school day is formidable. That race with the clock often forces teachers to speed up lessons and makes them lose patience with students who need more time to say what's on their minds. (para. 9)

Wassermann identifies a key conflict in the classroom: the race against the clock to cover curriculum versus the desire to give students a voice in class discussions. She accurately depicts the frustration, impatience, and fear that many teachers face when attempting to incorporate dynamic discussions into their classrooms.

When teachers introduce an online avenue where students are able to express their thoughts outside the time crunch of a normal school day, all students are given the equal opportunity to have a voice in the class. This equity of voice fosters relationship building, increases participation, and encourages deeper engagement with the subject area content.

Many students do not feel confident in their understanding of the curricula and hesitate to contribute to a conversation about the subject matter. Students tend to "perceive their role in the course as limited to obtaining (memorizing) information, rather than also using this information," Elmendorf and Ottenhoff (2009, para. 7) note. Transitioning students into the role of discussion leaders, facilitators, or, at the very least, active contributors begins to shift this antiquated perception of the student's role in the classroom.

When students begin redefining their role in a class from passive observer to active participant, they also begin to recognize each other as valuable resources and understand that teachers are not the only source of wisdom and "correct answers."

The quick pace of a real-time discussion, usually dominated by the vocal few, makes engaging in the conversation challenging. Students who are shy or anxious recede into the background under

the stress of in-class conversations. Online discussion boards encourage “independent learning and critical thinking skills, and provide a comfortable environment for students who are reluctant to speak in class. Shy and timid students are more likely to participate and ask questions online than they might be in class” (Lyons, 2004, para. 9). This creates equity of voice that makes it possible for every member of the class to be involved. The intellectual benefits combined with the relationship building that blossoms with the use of online discussions translate into more successful in-class conversations and stronger classroom community.

Another barrier to participation in real-time conversations in the classroom is the desire to record important information and ideas shared during a discussion. As Wassermann (2010) states, in-class discussions are typically rapid and ephemeral—to the point that students have two choices: either participate and have the conversation quickly fade from memory or abstain to take notes and capture the conversation for future reference. During an online discussion, students can actively participate without worrying about taking notes because there is an electronic transcript of the conversation that can be easily accessed for future reference after the discussion is over.

The benefits of engaging all students in the class dialogue, providing time needed to process and respond, while creating an online transcript of the work done make online discussions an attractive addition to the work done in class. In addition to these practical benefits, discussion skills are essential to life. In particular, online communication and collaboration skills are rapidly becoming essential 21st century skills.

In *The Use of Discussion and Questioning in the Classroom*, Brandi Davidson (2007) states,

Students need to know how to participate in meaningful discussion. This is an invaluable skill that will be used throughout their academic career, as well as in the work force. When students are involved in meaningful discussions, they learn from each other and are encouraged to think critically about and explore thoroughly what they are learning. (para. 2)

Learning to communicate via a variety of mediums will allow students to be successful in the years that follow high school. As teachers we must incorporate this technology into our teaching methodology to adequately prepare our students for a smooth transition into higher education and the workforce.

Community-of-Inquiry Framework

Community of inquiry literally refers to a group of individuals who share a common interest or physical space and engage in a question-driven search for truth or knowledge. An educational community of inquiry is defined as “a group of individuals who collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding” (*COI Model*, n.d., para. 1). This search for understanding via “purposeful critical discourse” can be challenging to achieve in the physical classroom given the variety of barriers that impede student participation.

Researchers such as D. R. Garrison have explored the way an online environment can be used to facilitate discussions and collaborative work to create a community of inquiry and engage students in deep and meaningful learning.

There are three interrelated components of the community-of-inquiry framework: social presence, teaching presence, and cognitive presence.

Social Presence

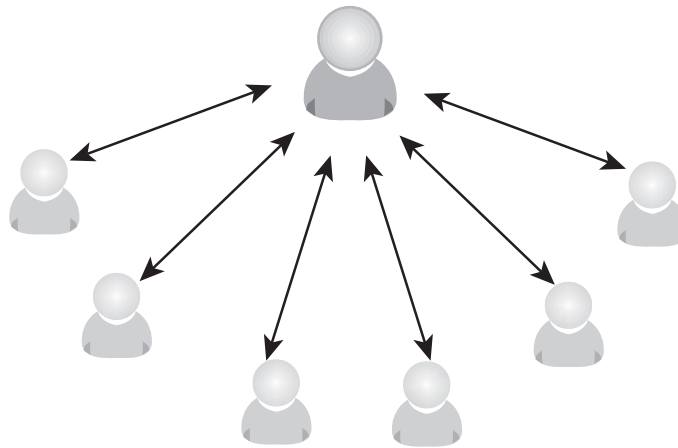
Social presence is the student’s ability to “establish personal and purposeful relationships” (Garrison, 2007, p. 63) through open and effective communication. The development of an individual’s social presence in an online environment makes it possible for him or her to form meaningful relationships with other members of the online community. These relationships are fundamental to the long-term success of students’ interactions and the quality of their learning. This is why it is so important for teachers to begin online work by clearly establishing their expectations for participation and fostering the development of respectful and supportive relationships. Chapter 5 presents strategies and provides resources to support the development of students’ social presence online.

Teaching Presence

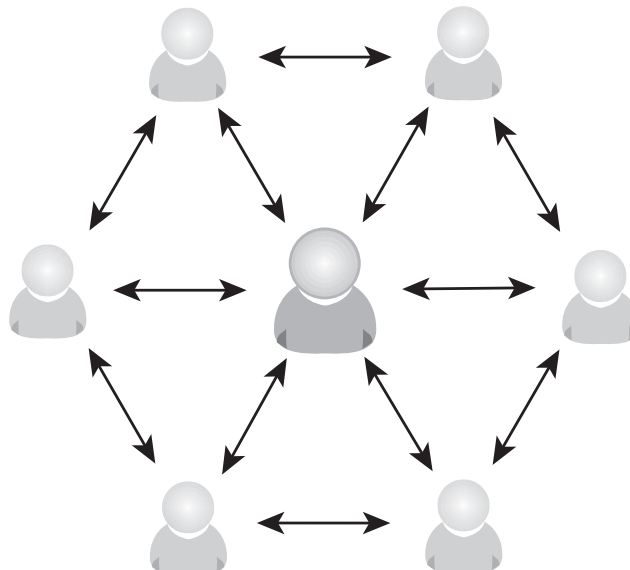
Teaching presence is the combination of direct instruction, curriculum design, and online facilitation, all of which are discussed throughout this text. Direct instruction in the Teacher-Designed Blend is the time spent in the physical classroom directing and supporting learning. The student-centered in-class activities described in Chapters 6–9 provide a variety of lesson ideas for teachers who want to use their direct instruction to place students at the center of the learning process.

Traditionally, teachers stand at the front of the room disseminating information while students are the receivers of that information. The goal of this book is to support teachers in using technology to create more opportunities for students to be active participants in their learning.

The image below reflects the flow of information in the traditional teaching paradigm. Information flows from teacher to student and, at times, from student to teacher.



However, in a community of inquiry the flow of ideas and information must also move from student to student, as seen in the visual below.



Curriculum design is discussed in Chapter 4, which explores strategies for designing strong questions that will drive dynamic discussions. Chapters 6–9 each focus on a specific subject—English, history/social studies, science, and math—and provide examples of online discussion questions and tasks to show educators how an online environment can be used to engage students, inspire higher-order thinking, and address the Common Core State Standards.

Facilitation styles are discussed in Chapter 3. A teacher’s student population and learning objectives will ultimately dictate which facilitation style that teacher chooses for his or her work online.

Cognitive Presence

Garrison (2007) defines cognitive presence “as the exploration, construction, resolution and confirmation of understanding through collaboration and reflection” (p. 65). Students must move beyond simply forming relationships to working together and communicating effectively to explore information, ask questions, and come to resolutions. For students to be successful in an academic inquiry, they must have a strong social presence, and teachers must clearly outline the expectations for work done online. Students must also share a common purpose or goal to develop the cognitive presence.

Together, social presence, teaching presence, and cognitive presence create an online community capable of engaging students in collaborative learning that shifts the paradigm from a teacher-centered to a student-centered model.

Chapter Summary

The term *blended learning* refers to a spectrum of teaching modes that combine traditional face-to-face instruction with work done online. Many teachers fear that adopting a blended learning approach will devalue their role, result in less face time with students, and diminish their control over the design and delivery of curriculum.

I advocate for teachers to claim the term *blended learning*. I believe it gives them a voice in the way technology is integrated into their traditional curriculum. The resources available online have made this an exciting time to be a teacher. The trick is learning how to adopt and integrate online tools that will work for us.

This book focuses on an emerging blended learning model I call the Teacher-Designed Blend. In this model the teacher drives the

integration of technology and uses it to complement existing curriculum to improve learning outcomes for students and create student-centered classrooms.

The community-of-inquiry framework provides a guide for the successful development of an online educational community. The community of inquiry is composed of three interdependent elements: social presence, teaching presence, and cognitive presence. Together, these components have the potential to engage students in meaningful conversations and cooperative collaboration that places students in the center of the learning process.

Book Study Questions

1. How might you approach a blended learning model given your curriculum? Are there activities you do in class that you can imagine moving online? If so, describe them. What work might be more successful online than in the classroom? How would using the online space create more time and flexibility in your classroom?
2. What fears do you have about the blended approach to instruction? How might you address these fears when blending online work with the work done in class?
3. How would you expect your students and their parents to react to this type of blended instruction? Would your administrators support your attempts to integrate an online component to complement your in-class work? How would you articulate your decision to embrace a blended learning approach to skeptical students, parents, and/or administrators?
4. What online resources or tools do you currently use with your students? Why do you use these? Do they save you time? If so, how? How do they positively benefit your teaching and/or your students' learning? How did you find out about these resources or tools?
5. What benefits would you expect to experience by adopting a blended learning model? How might it positively impact your teaching and/or your students' learning? What pain points associated with teaching might be mitigated by using a blended approach to instruction?

6. What are discussions currently like in your classroom? What barriers exist that make it challenging to engage all students in conversations? What strategies do you currently employ to motivate students to contribute to in-class discussions?
7. How might taking discussions online make them more successful? What factors might cause a student to engage in an online discussion versus an in-class discussion? What challenges do you think you might encounter taking conversations online?
8. What skills do you use in your daily life and in your work that you consider critical to your success? Brainstorm a list of the top 10 skills you believe to be most important to your success in life. How did you develop these skills? How do you teach these skills?
9. Are you currently teaching digital literacy—the ability to locate, organize, understand, evaluate, and analyze information using digital technology—in your curriculum? If so, how? How will digital literacy support student success beyond your classroom and subject area?
10. How might integrating an online education platform provide you with the time and flexibility to shift to a more student-centered classroom? What would a student-centered classroom look like in your subject area? What skills would students develop if your classroom were student-centered as opposed to teacher-centered? What benefits and/or drawbacks would you anticipate in a student-centered classroom? How might shifting to a student-centered classroom require you to grow and develop as an educator?

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