RTI and Blended Learning: A Perfect Pairing

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Instruction and Intervention Systems is one of the most research-based initiatives with which schools can engage. Designed to ensure high levels of learning for all, it employs the integration of response to instruction and intervention (RTI²), multi-tiered systems of supports (MTSS), professional learning communities (PLCs), positive behavior interventions and supports (PBIS), universal design for learning (UDL), special education, gifted education, and differentiation (Hattie, 2012).

Instruction and Intervention Systems deliver on the promise of equity for all through differentiated, individualized, and personalized strategies. Like blended learning—which is transforming teaching and learning and allows for differentiation, individualization, and personalization through digitally enhanced pedagogies and practices—it is a powerful and comprehensive approach.

Instruction and Intervention Systems and blended learning are certainly not incongruent and incompatible. In fact, they are complementary and interdependent. Making purposeful connections between RTI² and blended learning isn't simply convenient or interesting, it's necessary because combined, Instruction and Intervention Systems and blended learning have the power to transform teaching and learning and deliver on the promises of equity of opportunity, equity of achievement, and college and career readiness for all.

The speed at which a *school* can *respond* to a *student's responses* to instruction and intervention is critical. Traditional models of Instruction and Intervention Systems respond and adapt to a student's responses every few weeks. The potentialities of blended learning and digitally enhanced learning environments promise to allow schools to respond and adapt every few moments.

Furthermore, the power of devices, 24-7-365 connectivity, digital learning applications, and contemporary pedagogies, principles and practices will significantly improve all tiers of supports of students—from differentiated Tier 1 core instruction to supplemental and increasingly individualized and personalized Tier 2 and 3 interventions and enrichments.

To achieve these aims, we must behave more like the hedgehog than the fox (Collins, 2005). We must focus the initiatives that we invite or require schools and staffs to implement. Initiative fatigue, or in its most severe form, death-by-initiative, is a very real concern in education. Let's embrace the wisdom of the Pareto Principle (McKeown, 2014) and focus on one or two improvement efforts for which we have evidence of need and for which there is a high likelihood of profound impacts; other areas not directly impacted by the improvement effort will, in our experiences and based on the Pareto Principle, similarly improve. For example, students with more well-developed behavioral skills learn more academic skills; students who can comprehend texts more confidently and competently are likely to perform better in the sciences and social sciences; students with more mature behavioral and academic skills will probably be more engaged and less likely to exhibit less asocial behavioral skills. Instead of new initiatives, let's continue to work together, systematically, to enhance the significant

improvement efforts to which we have, after gathering evidence, researching, collaborating, and planning, dedicated ourselves.

Two of the most important and popular initiatives with which schools have engaged in the 21st century are Instruction and Intervention Systems and blended learning. Both are powerful and research based and yet often misunderstood and misapplied. We must integrate the operational and practical elements of these two high-leverage initiatives, for the sake of schools, teachers, and students. And we can. It's not a stretch. In fact, we believe that the introduction of blended learning principles and practices into schools may represent a tipping point in a school's efforts to truly serve all students within their Instruction and Intervention Systems-framework.

Our ultimate vision is to create and support personal learning plans for every student. We are beginning to deliver on this vision, with education and technology partners, in schools and districts across the country. Through a strategic integration of Instruction and Intervention Systems and blended learning, we believe that students will authentically engage in their learning journey as never before, with experiences that are *personalized*, allowing them to explore *passions* and pursue tasks for which they genuinely see a *purpose*.

What are Instruction and Intervention Systems?

Instruction and Intervention Systems represent a purposeful integration of research-based principles and practices. An Instruction and Intervention System ensures high levels of learning for all students, at all readiness levels, through the integration of elements from the most impactful initiatives within public education: response to intervention, multi-tiered systems of support, professional learning communities, positive behavior interventions and supports, universal design for learning, special education, gifted education, and differentiated instruction.

While response to intervention is the most significant element of Instruction and Intervention Systems, we employ the term Instruction and Intervention Systems to integrate the powerful features of RTI², MTSS, PLCs, UDL, special education, gifted education, and differentiation into a cohesive whole that is greater than the sum of its parts, with efficiencies and without duplicated or uncoordinated efforts.

The key attributes of Instruction and Intervention Systems uphold that:

- Differentiated, individualized, and personalized (or if you'd prefer, Tiers 1, 2, and 3), can and should be provided for all students. All students means both students at risk and students on level; students with IEPs and students without; students for whom English is a first language and students for whom it is not. All students have access to the core; all students receive more support based on evidence of mastery of core priorities, and all students receive targeted supports at the leading edges of their zones of proximal development (ZPD). Logistically and ethically, designing a system of supports that serves every student is the right thing to do.
- If it's predictable, it's preventable. We can predict some students will need more
 time and an alternative set of strategies to learn at high levels. We can predict that
 deficits in prerequisite skills will present a challenge for some students in their
 learning journey. Let's be ready. Instruction and Intervention Systems represent

- proactive and planned for supports for predictable needs. We can anticipate student needs; we must not be surprised.
- The best supports are focused and targeted. Whether academics or behavior; whether a student is struggling to master a grade-level priority or a student is struggling to master a skill that was a priority several grade levels ago; we must determine the causes (or antecedents) of student difficulty and focus our initial supports on a student's most immediate area of need. An effective intervention will never be represented by a group of students in a classroom working independently on a packet of worksheets with an instructor available to answer questions that may arise. Interventions are intensively delivered and intensively targeted.
- Instruction and Intervention Systems are self-correcting. They will not and cannot
 fail, because they are adaptively driven by evidence. When evidence indicates that
 students (or a student) are not responding to instruction or intervention, then
 changes are made until the right type of support is found.
- Instruction and Intervention Systems are inclusive of and inextricably linked to academics and behaviors. We have not encountered many students with significant deficits in foundational academic skills for whom years of academic failure and frustration have not led to significant behavioral needs. We have not encountered many students with significant deficits in behavioral skills whose behavioral challenges have not contributed to academic difficulties. And for all students, the behaviors, habits, and attributes known as 21st century skills, self-regulation, social-emotional learning, or executive functioning are as critical to success in college, career, and life as they are in academics. Unfortunately, behaviors have been under-represented within classrooms and teaching and learning cycles.
- Instruction and Intervention Systems are based on the inevitability of high levels of learning for all. Our mentality cannot be that we provide supports for six weeks with the hope that deficits will be ameliorated. Our mentality must be that we will serve and support as long as it take, because progress will be made and gaps will be close. We have high expectations for students, for our colleagues, and for ourselves. Don't bother with Instruction and Intervention Systems if you don't believe that high levels of learning for all students are inevitable. Don't go through the motions so that you can compliantly satisfy a policy or mandate. There is compelling experiential and neurological evidence to confirm that all students can learn at high levels and that is our professional obligation, to support and guide their doing so. There is no one else who can or should serve students' academic, pro-social, and pro-functional skill needs. We must consistently continue to adjust and revise—to identify the causes, antecedents, or explanation—that we need to find the right support. It's just a matter of time. If the current support is not yielding a satisfactory response, we'll try something else. High levels of learning for all are inevitabilities.
- Instruction and Intervention Systems ensure that schools deliver on the mission statement: "We believe that all students can learn and we'll do whatever it takes to make that happen." Designing structures that ensure that all students receive the

- supports that they need is a moral imperative. And education is a civil right. It's social justice. Instruction and Intervention Systems are the concrete representations of the imperative.
- Instruction and Intervention Systems allow educators to be predictive, proactive, and planned: We can predict that some students will require differentiation and scaffolds to access learning opportunities, to optimally succeed and grow within core environments. We can predict that students will need additional time and alternative supports at the completion of units of instruction, as revealed by evidence, to master core priorities and others will be ready for greater levels of complexity and will greatly benefit from opportunities to delve into priorities at greater levels of depth. We can predict some students will be in desperate need of immediate, intensive, and targeted supports to ameliorate significant deficits in foundational skills and other students will benefit from opportunities to dive deep into a passion highly specialized supports to meet students' at, and nudge them from, their zones of proximal development (commonly known as Tier 3). If we can predict it, we can prepare for it. Instruction and Intervention Systems represents our proactive preparation for predictable needs.
- Instruction and Intervention Systems are based on the principle of teach less, learn more. We must favor depth over breath; mastery over coverage; quality over quantity, learning over teaching. Students deserve more rigorous and relevant learning opportunities. They deserve opportunities to practice 21st century skills. They deserve differentiated, individualized, and personalized learning paths. To give students what they deserve to meet the mission statement of so many schools ("We believe that all students can learn and we'll do whatever it takes to make that happen."), we must challenge the inch-deep, mile-wide mentality of our curricular programs. We must favor: Depth over breadth; verbs (skills) over nouns (content); integrated disciplinary tasks over tasks related to singular content areas; quality over quantity; and mastery over coverage.
- Within Instruction and Intervention Systems, we serve students in need with a
 sense of urgency. Students need not fail within core environments for six weeks
 and then receive core and more supports (Tier 1 and Tier 2) for six more weeks
 before they received intensive and targeted supports; students at great risk for
 experiencing failure and frustration immediately receive highly specialized (Tier 3)
 supports. When we identify a student with a significant deficit in foundational
 skills, must act immediately.
- Instruction and Intervention Systems are based on evidence. There is no Instruction
 and Intervention System if we cannot measure the extent to which students are
 responding to instruction and intervention. We must proactively plan for efficient
 and effective assessments to fulfill the following evidence-gathering needs:
 - Which students have significant gaps in the foundational prerequisite skills of literacy, numeracy, or behavior?
 - To what extent are students learning the core content we teach during initial, differentiated instruction?

- What are the antecedents of, and/or the reasons that explain, the difficulties of students who are at risk?
- Assessments are evidence-gathering opportunities. Evidence is the engine that
 drives Instruction and Intervention Systems. The only Instruction and Intervention
 System is an effective Instruction and Intervention System it's a self-correcting
 system.
- Instruction and Intervention Systems recognize that instruction and intervention must be intensive, differentiation, engaging, with sound pedagogies, strategies, and practices, and with a "growth mindset" approach. *How* is more significant than *what*. As we have written before, RTI is a verb, and RTI is the central set of principles within Instruction and Intervention Systems.
- Instruction and Intervention Systems rest on inclusive environments. For a highly vulnerable student with significant deficits in foundational skills, the following are non-negotiable:
 - They must successfully and fully participate in inclusive and scaffolded core and more experiences.
 - They must receive immediate, intensive, and targeted highly specialized supports.

As we have often written, RTI (and therefore, Instruction and Intervention Systems, which draw most heavily on RTI) is a verb. In other words, educators ask, "To what extent are students (or is this student) responding to instruction and intervention. To what extent are they RTI'ing?" If we systematically and relentlessly ask and answer these questions, then we will remain faithful to the principles and practices of Instruction and Intervention Systems.

Extending the metaphor, RTI, and an Instruction and Intervention System, is not a noun. We will further explore what an Instruction and Intervention System is not in the next section.

Instruction and Intervention Systems

Instruction and Intervention Systems will not be successful if over-engineered or underengineered; if too much is tight or too little is tight. Imagine you're holding a handful of sand. Squeeze too tight and it rushes from your hand; too loose and it slips through your fingers. The same concept applies to Instruction and Intervention Systems. In the previous section, we described the attributes that ensure that efforts are coordinated and also responsive. In the bullets that follow, we will illuminate experiences from our schools and our colleagues that can unintentionally undermine and compromise a school's success in successfully implementing these research-based sets of practices.

Instruction and Intervention Systems are not rigid in terms of time frames.
 Students should not be expected to make adequate gains in six weeks or any other fixed period. While six weeks may be an appropriate time to check on a student's response to intervention (although we advocate for more frequent

check-ins), and while approximately six data points may need to be gathered and plotted for a trend to be determined to exist, interventions need not be stopped and changed at six-week intervals. Teams of educators may, for example, note that the support that has been prescribed for a student is simply not targeted antecedents to student difficulties after two weeks of intensive support; we should then alter the focus of the intervention to better match the diagnosed need. Or, teams of educators may note after a few weeks that the student's difficulty results from a simple misunderstanding that can be supported and ultimately ameliorated through less intensive intervention; we should make a change in the nature of the support. Or, consider a student with a significant deficit in a foundational skill such as a student in grade eight who experiences difficulty decoding and making sense of single-syllabic words, and consequently, of multi-syllabic words. Chances are high that this student will require much more than six weeks of support. Again, we should check on the student's response to intervention very frequently and support students with a great sense of urgency, but there is nothing magical or research-based about six weeks. Flexibility and adaptability are key elements of Instruction and Intervention Systems and RTI.

- Similarly, Instruction and Intervention Systems are not rigid in terms of supports. All students who are screened to, in all likelihood, have a significant deficit in reading due to scoring below the 9th percentile on a nationally normed reading assessment should not all be served with the same reading intervention program. This is rigid and inefficient. The best intervention is a targeted intervention. Reading is more than phonics; it is a complex set of skills and processes. We must ask why the student is experiencing difficulties in reading and target the most immediate areas of need and antecedents to difficulties. There are easily half-adozen explanations for a student scoring below the 9th percentile on a standardized reading assessment and each explanation can best addressed with a unique set of supports such as a unique reading intervention program. We regularly listen to students read to us who have scored below the 9th percentile whose rate, accuracy, fluency, and prosody (intonation, tone, stress, rhythm) are appropriate, but who can neither recall nor infer; and fluency are not these students' most immediate area of need and programs that do it all are not efficient. These students will most positively and dramatically improve when supported with a comprehension intervention. We regularly listen to students read who struggle with inaccuracies, self-corrections, repetitions, and lack of fluency, but who surprise us with their relative strengths in recall and inferential meaning-making. Comprehension-based or all-in-one interventions will neither target immediate areas of need nor efficiently support students so that they dramatically respond; a specific phonics or fluency intervention would be more appropriate. Instruction and Intervention Systems do not rigidly assign students to an intervention based on general difficulties in a broad domain.
- Instruction and Intervention Systems within schools will not look the same. There
 is not a *single* bell schedule, or coordination plan, documentation protocol,
 intervention program, or staff allocation process that will work in all buildings.
 There are multiple bell schedules that will allow for embedded supports.
 However, some type of modified schedule will undoubtedly be required. There

are multiple alternative strategies and targeted research-based programs that will meet student needs (although identifying these programs and ensuring staff are confident and competent in providing them is necessary). Instruction and Intervention Systems are not one-size-fits-all. However, the goals are the same: every student is responding to instruction and intervention. Given predictable student needs, we can predict that given supports will need to be proactively planned. Students will not all learn at the same rate or in response to the same first, best, core instruction, so we build in buffer times for more supports, commonly known as Tier 2 intervention and enrichment. Some students will struggle to keep up and will have major gaps in prerequisites due to significant deficits in foundational skills, so we build scaffolds into Tier 1 and immediately and intensively provide specialized supports, commonly known as Tier 3. The purpose of all Instruction and Intervention Systems is the same; the types of academic and behavioral supports that we can anticipate students needing are the same. How we fulfill this purpose need not be the same, and in all practicality, cannot be the same. Let's not make the mistake of mandating specific practices and processes. Instead, let's empower schools, school leaders, and all educators to design an Instruction and Intervention System that backwards plans from the goal of all students learning at high levels, whatever it takes.

It's not about—it's never about—moving students through the tiers. Students aren't in tiers; needs and supports are in tiers. We do not move students through tiers for the purposes of justifying a referral for a formal evaluation. In fact, a mentality of moving students through tiers represents a significant misunderstanding of Instruction and Intervention Systems and RTI. For example, it is entirely likely that a highly vulnerable students will begin school year with scaffolded Tier 1 supports and intensive and targeted Tier 3 supports in place, because the school screened for these needs before the conclusion of the prior school year. However, while time for Tier 2 supports will necessarily be proactively planned, Tier 2 supports may not be provided at the very beginning of a new school year. Tier 2 and 3 supports serve a different need. During the first few weeks of the school year, we will not need to have gathered evidence regarding student mastery of essential skills, and Tier 2 supports provide more time and alternative approaches so that students gain mastery of these essentials and so that other students, who have demonstrated mastery, can delve more deeply. Tier 2 prevents students from falling behind or farther behind; Tier 3 catches students up when they are significantly behind. They may both be necessary, but the notion of moving students through tiers is anathema for Instruction and Intervention Systems. We support students with tiered supports because they will be effective. Instruction and Intervention Systems are not a pathway to special education. Tiers are not checkboxes to fill so that we can justify a referral for a formal evaluation. Some students will be determined eligible for special education, but the most intensive of services must represent a seamless continuum of a school's Instruction and Intervention System. We refuse to allow special education to be a destination. Instruction and Intervention Systems (and RTI) are not pathways to special education; special education is simply the most intensive set of supports that we can provide. But the plan must be to intensively and successfully support students and then exit them to less restrictive

environments. There will definitely be students for whom special education supports are necessary and appropriate. And yet, we have historically overidentified and mis-identified students for these supports and the success receiving special education services has been lower than desired. To ensure greater successes for students who may receive special education services, we ask the following before requesting permission to conduct a formal evaluation to determine eligibility for supports:

- What will we be doing differently if and when an eligibility determination is made? Could we be doing that or could we begin doing that, now?
- What is the exit strategy? What evidence will reveal that students no longer need special education supports? What will it look like and sound like at that point?
- Preparing for the success of special education supports will make the likelihood of success much greater.
- Instruction and Intervention Systems are not protocol driven and documentation cannot represent obstacles to services to students. As noted above, Instruction and Intervention Systems are not rigid. Student study teams should become involved earlier; they should not be the gatekeepers to a formal evaluation. These expert teams should collaboratively inform highly specialized supports. Students should not need to rely upon a specific teacher to advocate for their success. We have all the data that we need to identify students who are at grave risk of failure. We must act. And, documentation, or lack thereof, should never be the gatekeeper to a child receiving support.
- There must be no general education and special education divide, regarding
 neither students nor staff. We support students based on their needs, not a label.
 Staff support students based on the staff members' availabilities and expertise,
 not their job title or funding source. We will reach our full potential as educators,
 professionals, and schools when we flexibly and collaboratively guide every
 student toward high levels of learning, whatever it takes.

Defining what an Instruction and Intervention System isn't as important as defining what it is, although we acknowledge that several attributes from each of the past two sections were simply two sides of the same coin. We will apply the same "what is it" and "what isn't it" methodology to blended learning in the next two sections before examining making a side-by-side comparison between blended learning and Instruction and Intervention Systems.

What is Blended Learning?

Google the phrase, "What is blended learning?" You'll find some very well-known institutions providing some very troubling answers. Some will tell you that blended learning is simply the addition of modern technologies to traditional classrooms. Others will tell you, almost verbatim, that blended learning is a style whereby some portion of traditional face-to-face instruction is

replaced by web-based online learning. These definitions are enough to make even the most masterful educators fearful. Add more to an already full plate?! Replace me?! How can I advocate for a methodology that seeks to replace me, either in whole or in part? These concerns are legitimate. We challenge you to embrace an alternative understanding of blended learning. It is not a methodology that seeks to replace face-to-face instruction, but rather to enhance it, to elevate it to a place of importance we couldn't have imagined before, and to extend its reach beyond the walls of the classroom and the hours in the school day. Blended learning seeks to bolster the number one most valuable resource in any classroom, the teacher. In doing so, blended pedagogies, practices, and strategies create environments in which differentiation, individualization, and personalization are no longer idealistic concepts. They become very real elements in our instructional processes. Nonetheless, there are still not commonly agreed upon definitions for blended learning. As such, here are the key traits of blended learning:

- Blended learning is a process. That process necessitates planning, orchestration, and execution on the part of all stakeholders. Furthermore, it's systemic in the sense that those stakeholders work collaboratively with technologies and one other to achieve results. In the same way we wouldn't look at a wheel and call it a bicycle, we can't look at a tablet in a classroom and call it blended learning. It's bigger than that. It's more comprehensive than that. Impactful blended practices require an evolution beyond the introduction of tools. In the most successful classrooms, districts, and schools, this evolution involves variables that include but are not limited to devices, infrastructure, content standards, instructional strategies, rigor, assessment, data analytics, relevant performance tasks, and relationships. Creating synergies amongst these variables does not happen by accident. It happens only as a byproduct of professional learning, collaboration, and commitment to success. Remember, the goal isn't simply to create isolated moments of successful blended learning. The goal is to cultivate school and district-wide habituated patterns of success relative to blended practices. If we honestly examine less successful blended learning attempts, we find either poor or no professional learning opportunities included in support of this goal. The result is a scenario whereby pockets of successful blended learning are observed, but systemic change is unlikely. In the same way Systems of Supports require everyone's effort and execution to account for the growth of the proverbial forest and the individual trees, so too does blended learning. When we leverage training and expertise to build cohesion and execute the processes (not just the practices) of blended learning, the picture of transformative schools has become less a mirage and more a reality.
- Blended learning is inclusive. Yes, it can work with your students. Yes, those students. Irrespective of age, content area, competency, socioeconomic status, native language, or any other variable perceived as an obstacle on the path to proficiency, blended pedagogies provide opportunities for differentiation, individualization, and supports when skill gaps exist. The same can be said for teachers. Blended learning is as much a veteran teacher's greatest asset as it is a first year teacher's. It can support the AP teacher to the same extent that it supports the teacher of students with special needs. What other classroom tool, in the hands of a masterful teacher, offers immediate feedback on student performance, elicits authentic excitement in kids, allows access to the entirety of

humanity's collective knowledge, and links students effortlessly to their teacher, peers, and nearly every other person on the planet? Show me a worksheet that does that. It doesn't take long to see that digital tools and resources, combined with levels of support, provide innovative ways to enhance the learning experience and promote student achievement. Digital assessments can be created, administered, and analyzed with efficiency so that we can identify learners who need additional support and differentiate our instruction (Tier 1). Students can access rich multimedia supports and Lexile-appropriate text at the click of a button to bolster a teacher's ability to offer more individualized instruction matched to their needs (Tier 2). Teachers can leverage technology and blended models of instruction to provide small group and personalized support to all students according to their skills, deficits, and particular needs; the teacher can meet the students where they are and provide intensive, focused, and immediate support when significant deficits in foundational skills exist (Tier 3). We support all students, with all levels of support, while using all of the tools at our disposal.

- Blended learning experiences are a necessity. If we claim to care about preparing students for success in school, college, career, and life, blended pedagogies must move from the periphery to the forefront. According to the most recent census data and survey results from the US Department of Commerce, "96% of working Americans use new communications technologies as part of their daily life, while 62% of working Americans use the Internet as an integral part of their jobs" (Pew Internet and American Life Project, 2008). We cannot dismiss educational technology as the "flavor of the month" and thus unworthy of our investment of time and money. But let's exercise caution; we should not and cannot abandon the successful practices of the past in favor of the teaching of the "future." Putting a computer in front of a student without great planning, and the incorporation of engaging and differentiated strategies will produce no greater success than placing a book in front of students, some of whom may not be able to making meaning of the text. Our goal is to cultivate a culture in which traditional and blended pedagogies work in tandem, with the support of digital tools, to help students develop the skills they'll need to be successful in any future endeavor.
- Blended learning prioritizes mastery over coverage. So often in schools we confuse the passage of time with evidence of progress; the two are not necessarily correlated. A student's arrival at the conclusion of a unit does not guarantee progress along the proficiency spectrum. As teachers we know this all too well. It simply signifies teachers' arrival at an arbitrary (but necessary) point in time whereby they've decided (based on the scope and sequence they designed prior to the beginning of the year) to initiate a unit of instruction. Blended instruction, a framework of RTI, encourages teachers to focus on prioritized behavioral and academic skills and concepts and differentiate, individualize, and personalize so that all students grow. Blended practices support RTI through inthe-moment evidence-gathering capabilities (see: Google Forms, Poll Everywhere, Kahoot, etc.) to both enhance instruction and provide concrete data to inform future teaching and learning. Digital tools enhance our abilities to gather and analyze data, optimize time, and gather and deploy resources. In successful blended schools, students progress from one skill set to the next as opposed to

simply moving from one day to the next.

- Blended learning is joyful. Need proof? Stand in a 6th grade classroom and watch students get their hands on a tablet for the first time. Then watch them the 5th, 15th, and 55th times. The exhilaration lasts. Does it dissipate slightly? Of course it does. But when devices are coupled with transformative teaching practices, and students use them to experience academic success, the excitement students experience has staying power. Curiosity is the root of engagement. As students wonder what experience their teacher has created for them, the inherent joy associated with that curiosity and engagement descends upon the most blended of classrooms time and time again. Think back to when your elementary teacher would hand out personal whiteboards or chalkboards to every student. I'll bet you remember being excited! Now imagine you can ask it a question, use it to create your own movie, design your own website, or hangout with peers on a different continent.
- Blended learning involves a blend of old and new. We call it blended for a reason. It's not exclusively "Tech Learning." The point is to combine the best of both and to offer students choices. Don't throw away those hard copies just yet. If we are sincere in our pursuit of greater degrees of differentiated, individualized, and personalized instruction, student agency must be respected and included. The fact is, some students will prefer hard copies of text for some tasks. Furthermore, blended learning accounts for direct and inquiry based instructional models. Many teachers worry that blended learning modalities solely favor inquiry based models of instruction, and require that teachers move unequivocally away from direct instruction. The truth is that masterful blended teachers are able to integrate tech with both instructional models to promote academic success. In short, we encourage teachers to do what works. Embrace the culture of and as opposed to the culture of or. If kids stand to benefit, utilize tech and direct instruction. If it fulfills the purpose of differentiation, personalization, and individualization, use tech and inquiry based practices. Choose to adopt a repertoire of high effect size strategies and tools as opposed to narrowing your practice to fit a rigid ideology that is centered more on ego than academic achievement for all.
- Blended learning is: Student-to-Student, Teacher-to-Student, Student-to-Device, and Teacher-to-Device. These are the four cornerstones of any blended learning environment. In fact, I would encourage any teacher venturing into this space to self-reflect by checking for each of these elements in their blended lessons. If one of these interactions is missing, we are probably missing a critical opportunity to make the experience more robust and meaningful. Blended learning should not be an isolating experience. The notion of kids silently click-clacking away on computers for hours at a time is frightening for every teacher. We don't wish for this from a teacher's perspective, and we certainly would never advocate for it as parents. Blended learning should be a more collaborative learning experience than has previously been possible for kids. No longer are students bound by the knowledge that exists in the classroom. They are now free to access the contributions of humanity past and present, known and unknown to them both synchronously and asynchronously at any time.

- Blended learning allows for differentiated, individualized, and personalized supports. We've referred to this idea frequently in the preceding pages, but its importance makes it worthy of another mention. In lieu of discussing Tiers 1, 2, and 3, we believe it's more productive to describe the implementation of RTI and blended learning through these lenses:
 - Our first line of defense in eliminating the opportunity and achievement gaps is differentiation. How can technologies equip educators with tools to plan for different learning styles and preferences and provide a multitude of experiences through which they can achieve mastery? Instead of asking why students don't learn the way we teach, we should ask ourselves how we can teach the way students learn. Let's increasingly adapt to students, instead of expecting students to adapt to us. What different text sources can we utilize to improve engagement? How can we improve access to rich multimedia and make it a vital part of our learning experiences? How can we create opportunities to empower staff and students to utilize social media platforms for academic collaboration? It is far more important for students to leave our classrooms more skilled at a thing they've never done than it is for teachers to leave more skilled at a thing they've always done.
 - Individualization plays a critical role within the system of supports that schools must define to meet all student needs and to ensure that all students learn at high levels. Blended learning pedagogies include:
 - 1) models for whole group instructional experiences that serve heterogeneous groups of students *as well as*
 - individualized supports during which teams provide more time and alternative ways for students to master priorities with which they are struggling.
 - Individualization requires evidence. But assessment, done right and collectively analyzed, takes time. Enter technology tools. Educational technology gives us the opportunity to generate in-the-moment data analytics that were previously unavailable. Kahoot, Google Forms, Poll Everywhere, Padlet, Google Docs, and dozens of other digital resources provide feedback on students' responses to our instruction and intervention. When we collect, and more importantly, use this information to inform future teaching and learning and individualized experiences based on students' responses to first, best instruction, we begin to realize the full potential of the perfect pairing of blended learning and RTI.
 - Differentiation leverages social learning to build student mastery of essential skills and concepts; individualization and

personalization targets specific student needs and passions. With precision, we can utilize digital assessments and resources to provide targeted supports for individual students in ways that are efficient and effective. We have the capability to use YouTube, Khan Academy, Apps, game-based learning, widgets, and an assortment of other tools to provide engaging asynchronous instruction for kids. This allows teachers to extend their own capacity within the walls of the classroom. Technology is a force multiplier; when coupled with progressive pedagogies and practice, digital tools and resources enhance both intervention and enrichment, expanding opportunities to provide students at various times, in various spaces, at various rates, and in various ways.

• Blended learning is adaptive and dynamic; so are digital tools and resources. This concept is hard for a lot of folks. Think about the last time your online bank changed its layout. What about the last time Facebook changed formats. Heaven forbid your email provider moves a button! Truth be told, we don't always adapt well to change. At the risk of getting all Who Moved My Cheese on you, we have to be ready and eager to adapt to changes as they occur. Not only that, we have to be comfortable using a variety of tools to account for the needs of a variety of children. In the space where Padlet is unsuccessful, perhaps Google Docs can be. Now, some teachers may scoff at this notion. "What's the difference?" one might ask? "Both are designed to promote in-the-moment collaboration." This is true. But, are we tied to our tools or are we tied to our outcomes? In this dynamic world, we can no longer major in minors. What's major is academic success. What's minor is the tool we prefer. If you have only one way for kids to collaborate asynchronously, find two. If you have only two ways for kids to analyze text, find three. And if you have one reason why kids should use the tool you like, make it zero.

Blended learning is, very simply stated, technological enhanced differentiated, and its principles and practices may finally allow us to deliver on the promises of differentiation and response to intervention. Let's now look at what blended learning *isn't*.

What Blended Learning Is Not

Blended learning methodologies cannot flourish in environments where educators are not aligned. As such, it is equally as important to understand the pervasive misunderstandings that exist relative to blended learning. While these are certainly not all of them, the following are amongst the most common when we look at what *not* to do in the blended space:

• Blended learning is not as simple as distributing devices. This seems obvious, but great school districts and smart educators all over the country have made this mistake. Please, adhere to the wisdom of Simon Sinek: first why?, then how?, with what (distributing devices) to follow? We can't deposit devices at a school and expect teachers to be transformative. That expectation has led to massive and expensive failures across the country and around the world relative to the learning

transformation that is inevitably underway. We shouldn't be surprised. Nobody rolled MRI technology into hospitals with the expectation that doctors would simply "figure it out." The device was introduced and a succinct training program with clear outcomes followed. Blended learning and Systems of Support are no different. It takes professional learning opportunities to be masterful. It takes time. It takes commitment to do things differently than you've always done, to achieve results you've never seen. Consider what you want kids to do with technology and what outcomes will be achieved long before you start asking questions about what technology to buy. Let that conversation guide your infrastructure requirements, your device selection, and your PD goals.

- Blended learning isn't as complicated as you fear. It is only as complicated as you allow it to be. The most common mistake educators make when they venture into blended learning is the error of "too much too soon." We don't give ourselves time to be learners. We think we immediately have to design lessons that redefine teaching and learning every day. We think we have to develop lessons that provide differentiation, individualization, and personalization for every child, every day, all day long. That expectation is a recipe for failure. It is ironic that inside a building where learning is encouraged, so few teachers allow themselves the time necessary to authentically learn and develop. The result is often a feeling of frustration and failure that leads many to abandon their technological pursuits altogether. Set manageable goals and expectations for yourself, your school, and/or your district. Decide the one, two, or at most three things you want to accomplish as a learning community in the first year. Work diligently to collaborate, plan, execute, evaluate, share, and replicate to achieve those outcomes.
- Blended learning is not successful when we force devices or digital content into traditional lesson design frames. Most design methodologies do not account for digital tools. As such, classroom teachers have to design a lesson in its entirety, and then figure out after the fact where modern resources fit into the equation. When we approach digital learning in that way, the result is not a succinct learning environment in which teachers and students flow in and out of interactions with technology with fluidity and purpose. It becomes a traditional lesson with an extraneous "technology part." Let's commit to utilizing design principles that account for digital tools and resources, combined with blended pedagogies and practices, at the outset. Consider content standards, problem-based learning and project-based learning, high-effect instructional strategies, digital tools, blended models, and digital assessments as equally critical parts of the collaborative design of learning experiences.
- Blended learning is not isolating. Digital tools can and must connect students with teachers, peers, and outside resources in ways that were not previously possible.
 We should neither abandon the elements of classroom instruction that allow us to cultivate meaningful relationships with kids nor isolate students from one another. Successful blended classrooms are flush with collaborative interactions, feedback cycles, meaningful dialogue, Socratic questioning, debates, and numerous additional opportunities for human connectivity. We frequently tell

teachers, if students haven't had the opportunity to engage with you and one another during a given lesson, head back to the drawing board to create opportunities for each.

- Blended learning is not age or experience dependent. There's a common
 misconception that digital learning is a young teacher's game. After literally
 hundreds of classroom observations, be assured there is no truth to this
 perception. Veteran teachers and first-year teachers alike will regularly experience
 success given the appropriate training and preparation. The common
 denominator of success is neither age nor experience. Success rests on support
 and one's willingness to step into the world of the unknown.
- Blended learning is not compatible with teacher-centered pedagogies. Blended instruction must be learner-centered. The role of teacher in the educational universe is evolving. Successful blended environments don't require the teacher to be the focal point of the classroom and can often be more effective when teachers are not the focus of instruction. In blended learning models, the teacher becomes a facilitator and guide, while also providing the knowledge and insight into the course material that they always have. Teachers will be coaches and model learners, with experiences of concepts and skills. A successful transition to an effective blended model is one in which educators know, based on student needs, when and how to fulfill their various roles as teachers, guides, and facilitators. If we compare the traditional classroom model to our solar system, the sun around which all things revolve is the teacher. While we may want to say that the student is at the center, if we look honestly at our traditional education models, it is teachers, not students, who are front and center in the academic solar system. Teachers, not students, exert the most energy in the classroom. Teachers still view themselves as the primary source of academic light. The prevailing thought is that without the teacher's wisdom shining as the central focus of our classrooms, our students, much like earth's organisms without the sun, will not grow. This is a model that has been accepted and replicated for generations, and with good cause.

For centuries, educators have been our most valuable sources of knowledge, information, and insight. Now, in the digital age, students increasingly won't see teachers as heliocentric in the classroom solar system. They are now used to finding information themselves or figuring out how to research and do things on their own. Not only does the digital learning transformation create a shift in teaching and learning, but it also shifts the delivery style of instruction. The educator's role in a blended model is to provide student-centric experiences that bolster this new type of learner. Ideally, these shifts will deepen the level of learning with which all students engage.

Instruction and Intervention Systems and Blended Learning: A Side-by-Side Comparison

Neither Instruction and Intervention Systems Learning nor blended learning are new concepts. Instruction and Intervention Systems date back to the 1960s (Bloom, 1968) and one could argue that the pedagogies and practices of blended learning are grounded in Carol Ann Tomlinson's

work from the 1990s. Blended learning is, in many ways, simply digitally enhanced differentiation.

In this section, we propose that the tiers of Instruction and Intervention Systems map nearly perfectly onto the goals of blended learning and provide a tabulation side-by-side comparison.

In guiding schools' blended learning practices, the International Society for Technology in Education (ISTE) has described the similarities and differences between differentiated, individualized, and personalized instruction (Grant & Basye, 2014). Their descriptions are remarkably aligned to the principles and practices that we have employed when operationalizing Instruction and Intervention Systems (our comments are in parenthesis):

- Differentiation with Core Environments: Teachers respond to student needs by making adjustments to process, content, and product, based on how students learn best (traditionally known as Tier 1).
- Individualized Supports, Based on Evidence of Mastery of Core Priorities: If differentiation is the *how*, individualization is the *when*. Learning progresses at different rates; some students may need to review concepts, while others may be ready to immerse themselves in those concepts (traditionally known as Tier 2).
- Personalization and Specialized Supports, at the Leading Edge of Students' Zones of Proximal Development: If differentiation is the how and individualization is the when, then personalization is the where as in, where are students in their learning journey? Students who are not yet performing at expected levels, due to significant deficits in foundational skills, receive targeted and intensive supports at the leading edge of their zones of proximal development. Students who are meeting and exceeding age and grade expectations dig deeper into areas of interest (traditionally known as Tier 3).

We believe that reimagined and redesigned instructional days, such as those in the samples that follow, could allow all students to access the unique and mutually reinforcing support represented by differentiation, individualization, and personalization—an Instruction and Intervention System powered by blended learning pedagogies and practices.

Sample: Secondary Block Scheduling (Alternating days)

Period 1/2	8:00	10:00	Differentiated Core (Tier 1) – 60 minutes 5 minute passing Individualized More (Tier 2) – 25 minutes 5 minute passing Personalized and Specialized (Tier 3) – 25 minutes
Period 3/4	10:10	12:10	Differentiated Core (Tier 1) – 60 minutes 5 minute passing Individualized More (Tier 2) – 25 minutes 5 minute passing Personalized and Specialized (Tier 3) – 25 minutes
	12:10	12:50	Lunch
Period 5/6	12:50	2:50	Differentiated Core (Tier 1) – 60 minutes 5 minute passing Individualized More (Tier 2) – 25 minutes 5 minute passing Personalized and Specialized (Tier 3) – 25 minutes

Sample: Elementary Scheduling

8:00	8:30	Reading	Differentiated Core (Tier 1)	Literature, Informational Text (science and social studies)			
8:35	9:05	Reading	Individualized More (Tier 2)				
9:10	9:40	Reading	Personalized and Specialized (Tier 3)				
Break							
10:00	10:30	Specials (or electives) and Teacher Collaboration Time					
10:35	11:05	Writing	Differentiated Core (Tier 1)	Narrative, Informational, Opinion (science and social studies)			
11:05	11:35	Writing	Individualized More (Tier 2) or Personalized and Specialized (Tier 3)				
Lunch							
12:05	12:35	Math and Science	Differentiated Core (Tier 1)	A focus on habits of mind and mathematical practices			
12:40	1:10	Math and Science	Individualized More (Tier 2)				
1:15	1:45	Numeracies	Personalized and Specialized (Tier 3)				

How are Blended Learning and Instruction and Intervention Systems closely aligned? We tabulate a few important similarities below:

Blended Learning	Instruction and Intervention Systems	
Popular	Mandated	
Digital driven	Could be	
Schedules	Schedules	
Classroom environments	Should be	
Differentiation	At all tiers, particularly Tier 1	
Growth-based	How much and in what ways are students responding to instruction and intervention?	
Heterogeneous <i>and</i> homogeneous	Tier 1 is heterogeneous Tier 2 and Tier 3 are homogeneous	
Analytics	Diagnostic discoveries	
Algorithms	Problem-solving	
Inclusive of entry point and current readiness levels	Inclusive of all students, readiness of label	
All assessments are formative	Are students <i>responding</i> to instruction and intervention	
Assessment as learning	Should be (visible student learning – Hattie)	
Collaborative staff practices	PLCs	
Multi-grade	Tier 3 could be, often is	

We're both idealists and pragmatists. We fiercely believe in the ideal of education, in education as a civil right, as high levels of learning for all a moral imperative, and of schools as instruments of social justice.

As pragmatists, we recognize (and celebrate) that both Instruction and Intervention Systems and blended learning as popular, and in some jurisdictions, mandated. They should be; both are grounded in research and evidence.

A frustrating practice too often occurs in schools that erodes any hopes of systematic and coordinated approaches to serving students. Initiative fatigue—the condition in which a school and staff lose their way and struggle to implement any one effort well—plagues our schools. Frustratingly, we miss a powerful opportunity to powerfully enhance a collaborative system of support when we do not make connections between potentially effective sets of practices, that when introduced and implemented separately risk more than simply failing to deliver optimal results; the risk is that they will individually and spectacularly fail.

Let's embrace and implement the principles and practices of Instruction and Intervention Systems and blended learning – and, do so in an integrated and coordinated manner that aligns their powerful attributes for the good of both students and staffs.

Disruptive vs. Sustaining Innovations

Excitement around systems of support and blended learning, as far as we are concerned, is a fantastic thing. In our minds this excitement represents a desire to utilize digital tools and the principles and practices of Instruction and Intervention Systems in tandem to improve the academic experience for all children. It represents a desire to utilize what Dr. Clayton Christensen calls "disruptive innovations" (Christensen, 2014) to forge a more successful future in our schools. But we should be cognizant of our realities as we move enthusiastically toward this outcome.

While striving for the revolutionary, it is critical to proceed in an evolutionary manner. That is to say, we can't expect to place disruptive technologies in the hands of students and teachers and immediately see the landscape change forever. Innovation that truly transforms—and positively disrupts—stakes time, proceeding through a series of steps that are necessary to build proficiency and confidence; these steps in the process cannot be overlooked for the sake of wanting to move fast. Look at the past fifteen years as an example of what this means for us. Fifteen years ago we taught in a school that went one-to-one. One laptop for every student in the school. We were thrilled. We were innovators. We were going to change the face of academics in our school and in our country. Fast forward fifteen years; innovators like myself and others have not significantly disrupted the status quo relative to blended learning environments. Instead, we've seen these methodologies and ideologies take hold slowly and methodically as sustaining innovations. Are we happy about the pace? Of course not. But that certainly doesn't mean we throw the baby out with the bathwater. We are thrilled that every day more and more stakeholders are developing the confidence and experiencing the successes needed to move blended learning from a sustaining innovation to a disruptive innovation.

At the classroom level, sustaining innovation means systems of supports and blended learning work in tandem to change the continuously improve teacher practices and student outcomes. Digital tools and resources combine with contemporary pedagogies and practices with an organized system of support to meet students' differentiated, individualized, and personalized needs. But perhaps the classroom itself and the school's daily schedule and infrastructure

remain largely intact. This is not a bad thing. In fact, this is a great thing! It represents that evolutionary movement from good to great that is necessary to support the innovative mindsets that need time to take root.

The innovation becomes disruptive when digital tools are used to differentiate, individualize, and personalize, and the school itself looks, sounds, and feels different than it ever has. Classroom seating accounts for small group and individual remediation. Bell schedules account for mastery instead of minutes. Student hangouts accommodate technological needs. Teachers congregate as a means of collaborating. Learning for communities, staffs, and students occurs whenever, wherever, and always. Making this vision a reality unequivocally requires that we take our time and move forward with a more gradual approach to innovation. Failure to do so means we will potentially leave teachers and students running to catch up with the ambitious changes taking place around them. It's hard enough for students to learn to ideas and concepts. Imagine the challenges they would face if, in a moment, we changed everything about their learning environment. Would it be ultimately for the better? Absolutely. But we can't sacrifice a cohort of teachers and students in the immediate present for the sake of fulfilling our desires to be disruptive innovators right this minute.

To provide a sense of measured urgency around blended learning and systems of supports, we need leadership that is able to see the benefits in sustaining innovations while pushing the collective toward disruption. These leaders will consistently push all stakeholders toward disruptive technologies and work diligently to promote the evolutionary cycle that has been absent in our schools for far too long.

Leadership for Instruction and Intervention Systems and Blended Learning

Leadership of all kinds and at all levels is absolutely essential to drive, support, and sustain continuous improvement. We will describe two types of leadership:

Leadership as a Position: The visible leadership of school principals and other site leaders is essential to ensuring success for students and staff as well as greater outcomes for schools. For any effective work to take hold in a school, it must be fully supported by the school leadership team and must become part of what a school believes. It also must be communicated to all stakeholders that the work will lead to better outcomes for all students. Schools that behave as PLCs and as collections of PLCs have clarity of purpose and a collaborative culture, are able to turn collective inquiry into a best practice, examine current reality, are action oriented and committed to continuous improvement, and have a strong principal who empowers teachers to be leaders (DuFour, DuFour, Eaker, & Karhanek, 2004). The school principal matters. We firmly believe that leadership is a disposition, not a position, but this does not mean that the school principal isn't incredibly significant within all aspects of a collaborative system of support. The principal is present in meetings, assists in gathering and interpreting evidence, participating in core, more, and specialized learning environments, supporting and gathering supports for staff and students, and generally motivating the process. The principal is the lead learner and the goal is high levels of learning for all.

Leadership as a Disposition: Distributed leadership is not an option. All educators are responsible for leading the work required to transform teaching and learning. We will describe a

few of the specific tasks for which leadership is necessary below. First, let's describe what is needed for all educators to assume and exercise their professional responsibilities:

- Time: Educators must have protected time within the professional day during which focused and impactful collaboration can occur with the goal of continuously improving student learning through continuously improving teacher practices.
- Trust: Collaboration and coaching rests on the principle of co-learning. We
 cannot violate the promise and power of collaborative learning through even the
 slightest hint of evaluation and judgment. We must also strive to leave ego and
 defensiveness aside and strive for a...
- Growth Mindset: We must model the continuous improvement habits that we expect of students. Leading change requires openness, humility, and patient persistence.

As we lead the learning transformation that today's students and their futures demand, we must have a plan that respects and guides the changes that will be necessary. We borrow Simon Sinek's "Golden Circle" to analyze ways in which the power Instruction and Intervention Systems and blended learning can be harnessed on behalf of progress (Sinek, 2009).

Why Instruction and Intervention Systems and blended learning?

- To achieve the lofty goals that we must embrace for ourselves and our students, our efficiencies must improve and our reach must extend beyond any single classroom.
- Now more than ever, we must continuously improve in ensuring that more students are more prepared for life.
- Research-based principles and practices exist. We know what to do. We must eliminate the knowing-doing gap.

How will Instruction and Intervention Systems and blended learning be successful?

- Collectively with your colleagues, explore the elements of response to intervention, blended learning, differentiation, the Rigor/Relevance Framework (Daggett), the SAMR (Puentedura, 2006; 2009) continuum and integrate them into a new set of practices within your school that are greater than the sum of its parts.
- Teach less, learn more: Focus on the most critical concepts and skills that student need
 for success in school, college, career, and life so that there is time to go deeper into
 critical thinking, creativity, problem-solving, and the nurturing of self-regulatory,
 executive functioning, and social-emotional skills.
- Educators must talk less; students must do more of the thinking and working.
- More assignments is not the goal. Higher quality tasks with which students engage is our objective.

- Let's not let perfection be the enemy of progress. Action, not only ideas. However, don't confuse movement with progress.
- Measure our progress. Success breeds success and more stakeholders will be more committed when the progress of students is visible. What gets measured gets done. Authentically and creatively measure changes in outcomes, then celebrate and adjust.

What elements are most important to successfully realizing the potential of Instruction and Intervention Systems and blended learning?

- Logistics matter: Ensure that time and personnel are allocated in new and logical ways that match the needs of students and in support of the goals of schools today.
- Develop efficient systems for coordinating and communicating
- Provide the tools and resources that staffs and students need AND the ongoing coaching so that investments are guaranteed to return gains in student learning.

We can do this. We must. We'll leave you with our favorite quote from an educational hero. It dates from 1979 and it still applies today:

How many effective schools would you have to see to be persuaded of the educability of all children? If your answer is more than one, then I submit that you have reasons of your own for preferring to believe that basic pupil performance derives from family background instead of school response to family background. We can, whenever and wherever we choose, successfully teach all children whose schooling is of interest to us; we already know more than we need to do that; whether or not we do it must finally depend on how we feel about the fact that we haven't so far.

-Edmonds, 1979, p. 23

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