

**Getting Smarter
About SPED**

A Conversation with
Tom Vander Ark About
Blended Learning Decisions
and Implications



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Executive Summary

Blended learning represents a shift in the classroom to online delivery of individualized learning for a portion of the day to make students, teachers and schools more productive. The Christensen Institute adds that blended learning gives students some element of control over the time, place, path and/or pace of content and instruction.

For students with special needs, blended learning can offer increased engagement and emphasis on the “individual” in IEP. But how do educators and administrators go about implementing blended learning in their schools, and what do they need to consider along the way? And how do we fulfill the promise of blended learning for all students?

Tom Vander Ark, author of *Getting Smart: How Digital Learning is Changing the World* and CEO of Getting Smart, a education advocacy firm, explores these questions and more with Maria Carr, Special Education Coordinator for IEM and Robin Wise, Blended Regions Special Service Manager, K12, who both shared their perspectives and insights. This whitepaper conversation draws on content from a recent webinar with PresenceLearning.

–PresenceLearning

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Blended learning has us think about what is best for the student, how we can be more productive, how teachers and students relate to each other, and how to make schools better.

What's So Exciting About Blended Learning?

When we think about blended learning and special needs students, four overarching opportunities come to mind:

1. The opportunity to better adjust with the emergence of touch technology and new apps.
2. The opportunity to create individual learning plans for all students and really learn from the last two decades of working with students with special needs and managing IEPs.
3. The opportunity to use distributed workforce strategies to better match specialists with kids with special needs.
4. The opportunity to create a more personalized learning environment that addresses the needs of all kids, particularly those with special needs.

When we talk about blended learning, the Christensen Institute talks about giving students, for at least a portion of the day, some control of the time, place, path and/or pace of the online delivery of content and instructions. Tom Vander Ark summarizes that a shift to an online delivery for a portion of the day is really done to make students, teachers and schools more productive. This incorporates thinking of rapid pathways to mastery, as well as thinking about what modality is going to be best for the student, but also how a new learning environment can be more productive for teachers and make schools work better. It asks us to rethink delivery and how teachers relate to students and to each other.

Why is the broader topic of blended learning so exciting?

1. **Personalization.** Personalization is the ability to meet the needs of each individual student. The School of One program in New York City is an example of a math program with eight different modalities and predictive algorithms to help recommend a "personalized playlist of learning" for each student. This better addressed the needs of kids and created environments for teachers where they can be really successful.
2. **Engagement.** Technology can do a better job of engaging kids and

addressing boredom using game-based strategies to encourage persistence.

3. **Adaptive learning.** I think this is maybe the most important development of the decade: technologies that combine the power of adaptive assessment to quickly diagnose a student's learning level and then match that with targeted tutoring. We have seen some really exciting developments in the last 36 months and I can wholeheartedly recommend that every student spent some time every week, maybe 120 minutes per week, in an adaptive instruction platform.
4. **Empowers teachers.** I think it is exciting to see how blended learning is empowering teachers and is creating opportunities for future leaders.
5. **Individual path and pace.** It is exciting to see the potential for individual path and pace as described in the Christensen definition of blended learning. One of the projects I am super excited about is Education Achievement Authority. They are working with the 12 lowest performing schools in one of America's struggling cities, and they have made extraordinary gains using a new platform called [Buzz](#) in a competency-based progression where every student works at his or her own pace in their own path, but with lots of opportunities to work together.
6. **Competency-based.** This means that kids show what they know and move on when they are ready. This is the perhaps most profound change that we will see. It is probably a decade-long change because it fundamentally changes the nature of our environment and how kids progress through the system.
7. **Flexibility.** Flexibility allows schools to be more dynamic. This paper will later discuss flex models that are online learning schools that meet onsite with a lot of support systems for kids, and those kinds of flex schools can quickly be provisioned and modified so it is much easier to plan a new academy or a new delivery system for kids.
8. **Distributed specialists.** Distributed workforces have been around in the private sector for 15 years, but we are finally beginning to take advantage of the potential of teachers and specialists working remotely. For the last 15 years, that has meant online education, AP courses or credit recovery courses. In the last three years, we've been watching the beginning of distributed specialists in special areas starting with speech therapy, and PresenceLearning has really been a pioneer in that space. This is now being extended with occupational therapy and other related service categories.

9. **Improved conditions and careers for teachers.** Teachers have long operated in isolation and really tough working conditions, and I am excited about the potential of creating schools that work better for teachers that improve conditions, are more collaborative, have better tools and better data and have more exciting career pathways.
10. **Dyanmic models.** Examples of dynamic models include Cornerstone Charter Academy in Detroit and Rocketship Education.

By using data to progress monitor constantly, we are creating better goals based on individual needs.” Robin Wise, Blended Regions Special Service Manager, K12

Implementing Blended Learning

Blended learning really does change a bit of everything about school: its structure, its schedule and its staffing patterns. Because of this big shift, it is important to have a broad base of support, and this requires a lot of conversation. Blended learning leaders need to be conversation leaders in the community. You will need to build support among many stakeholders:

1. Superintendent leadership
2. Board support
3. Teacher support
4. Union support
5. Principal support
6. Leadership schools/programs
7. Community engagement/support

There are four steps in implementing blended learning in schools, which will be covered in this section as we discuss the decision points along the way:



For in-depth information about implementing blended learning, download the Blended Learning Implementation Guide 2.0 written by Digital Learning Now, an initiative of ExcelinEd, Getting Smart and The Learning Accelerator: <http://digitallearningnow.com/site/uploads/2014/05/BLIG-2.0-Final-Paper.pdf>

Funding the Shift:

- Phase in over 3 years
- Online instructional materials/OER
- Use T1 and maximize E-rate
- Online professional development
- Go paperless
- Leverage grants
- Charge a user fee
- Consider leasing

Funding the Shift to Blended Learning

People often have questions about how to fund the shift to blended learning. There are many ways you can do this. The first thing to keep in mind is that the shift doesn't have to happen all at once. You can make a plan over the course of three years to phase out existing instructional materials and gradually shift to online digital materials while you are improving student access to technology. Title I and E-rate funds can be useful, and then over the course of three years you can re-allocate funds so that you are freeing up about \$200 per year per student. You might also be able to save money in new online professional development or buying less paper. It always helps to leverage both private and public grants. You can charge a small user fee for devices, particularly if they are take-home devices that are always covered by your insurance, but if you are in a hurry and you want to flip the school and get everybody a device, then leasing might be an appropriate strategy.

What's Your Strategy?

There are five decisions that schools and districts need to make to implement a blended learning plan:

- Strategy
- Model
- Platform and Content
- Device
- Staffing and Development

The most important thing you can do is to start with your goals and have a community conversation about what you are really trying to accomplish. Describe the kinds of learning experiences that you want young people to exhibit and think about the kinds of roles they can take on. Think about authentic roles like students as historians, students as scientists, students as journalists, and consider the kinds of work products you want them to be able to develop. Build on the Common Core, but don't stop with the Common Core when describing what you want students to know and be able to do.

For students with special needs, describe the kind of growth that you are hoping to see and the number of students exiting from special education.

With blended learning, we are talking about creating individual competency-based pathways for every student, not just kids who have an IEP. The opportunity to create individual learning goals for every



Source: DigitalLearningNow.com

student and to really have dynamic IEPs that are part of that environment is really the exciting future that we are headed for. I encourage districts and schools to try to describe that in their learning goals so it's clear what they are looking for.



A Perspective from the Field: Progress Monitoring

One of the things that I absolutely love about the blended learning opportunity is progress monitoring. We are given the opportunity to monitor a student's brain goals all of the time, every day, constantly based on online data. We also do progress monitoring on tablets. All of our teachers have a program that we use to upload our goals, and when they are out on the floors working with the students in the general education setting, we can do progress monitoring constantly. By doing progress monitoring constantly and not every nine weeks like we used to do, what we are actually doing is using the data. When we use the data to progress monitor constantly, we are able to create better goals based on individual needs. So I believe that our blended schools actually have better, stronger, more individualized goals than we could have ever done in the traditional school based on the amount of information that we get from the students.

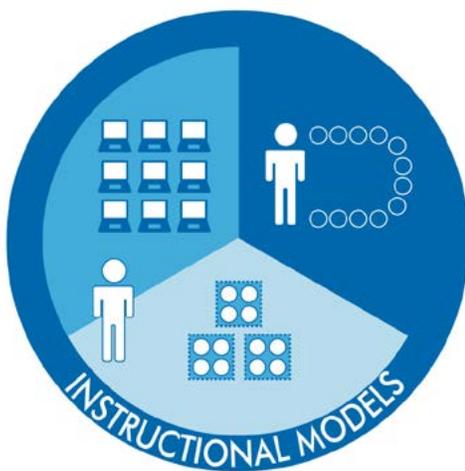
- Robin Wise, K12



Which Model Will Work Best in Your District?

Another strategic decision you need to make is whether your schools are all going to look the same or whether they are going to look different. This is a big implication for special education in a district. In a place like Mooresville, all the schools have the same model, curriculum and devices, so it is quite easy for specialists working across multiple schools. In other districts, particularly larger districts like New York City and their iZone, there are many different kinds of school models, many different platforms and many different devices. It is very important to weigh in when your district is having a conversation about school models because this will have implications for people working across a number of schools.

In addition, we need to ask how to leverage teacher leadership. What has changed dramatically since 2010 is that many students, parents and teachers have flipped and blended their own learning and they are off to the races. School leaders need to quickly survey what is actually



Source: DigitalLearningNow.com

Best Options for Special Needs:

- Lab rotation facilitates time with specialists
- Class rotation promotes inclusion



Lab rotation at Rocketship

Source: Getting Smart

happening in their buildings and see what tools teachers are using, how students are actually learning, what parents are using at home, and then find ways to leverage the students, parents and teacher leadership and then finally decide whether to flip at all at once or to start some pilots and pace in blended learning.

There are two main blended learning models:

- **Rotation** - With this model, students move from a face-to-face environment to an online environment, using both lab rotation and classroom. This lab rotation existed for around 15 years where students go as a group to a computer lab and use adaptive software such as Dreambox, ST Math or i-Ready. Rocketship, which has the highest performing elementary schools in California, uses this model. A type of rotation model that is becoming more popular with the spread of the tablet is a class rotation model where students move from a teacher-led group to an activity station to an online learning station.

	Student Group A	Student Group B	Student Group C
Block 1	Computer Lab & Project Work	Humanities Block	STEM Block
Block 2	STEM Block	Computer Lab & Project Work	Humanities Block
Block 3	Humanities Block	STEM Block	Computer Lab & Project Work

Source: DigitalLearningNow.com

- **Flex** - Flex models offer online content and competency-based progressions along with on-site support. i-Prep Academy in Miami-Dade and K12 are examples of this type of model.



Perspectives from the Field: Models and Inclusion

Robin Wise, K12: With our flex model, we have highly qualified teachers in the areas of math, science and history. We also have PE and music in some of our schools. During the day, the students have individual cubicles, a little office if you will, out in a large instruction floor that we call the flex floor. Based on individual student data that is assessed weekly, pullout groups are developed in the different content areas, and the pullout groups are there to support those students that are at risk in a specific subject or area. This is also for students on track and for groups of students that need enrichment.

Students are meeting with their teachers based on their performance for the week, and groups are then personalized based on the individual student's data from the previous week, and then pullout groups are established from there. All the pullout groups in our small group instructions are less than 15 students, many times smaller than that. Again, it is all based on individual student needs. So while the students are working independently for a portion of the day, they are receiving direct instruction based on individual need for another portion of the day.

Tom Vander Ark, Getting Smart: A key difference to understand is that a flex model is a fully individualized program where, in most cases, kids are moving at their own paces, so it's an individual progress model. Most rotation models -- both lab and classroom -- still rely on a cohort where kids are moving together as a group. They may be more dynamic than the historical age cohort, but they are cohort-based.

Maria Carr, IEM: I think it all depends on the teacher and students. One of the cons regarding lab rotation could be that there is less student-teacher interaction, and with the class rotation a pro would be that students, especially our special education students, need to have little bit more social interaction, and the class rotation model would support that. The lab rotation would probably support more of the individualized needs of the students' academics.

Tom Vander Ark: Rocky Mount Prep in North Carolina has a lab rotation model in the intermediate grades; this makes it really easy for students to access their online speech therapy in the middle of a language rotation. This indicates that lab rotation can easily facilitate time with a specialist on variety of needs, but

as Maria noted, sometimes a class rotation can better promote inclusion and relationships.

Robin Wise: One of my favorite topics in blended learning is inclusion. What we have seen in our school is that we have students who are entering our schools that have been in a resource room for a part of the day, and that we can now include more because no longer do we have to post it in the classroom to give them specialized instruction in whatever area that they need additional support with. Now we can have students with special needs in the general education environment in the flex floor for accessing the curriculum with the same age and grade peers, and then pullout in classes based on individual needs.

Another thing we have seen is that problem behaviors decreased. In the flex model in particular, we have less transition time in which the entire school is transitioning simultaneously, so we don't have students at their lockers between periods. What we've seen is that these behaviors greatly decreased because those transition opportunities where we would often see those behaviors exhibited happened at very structured times unless they were transitioned into breakout groups.

So we've seen inclusion for students with behavior concerns and we've seen stronger inclusion for people with academic concerns. I can say that a good majority of our students are fully included in the general education setting for the good portion of their day.



Source: DigitalLearningNow.com

What Platform and Content Should You Use?

The next decision you have to make is about platform and content. It is important to decide whether whether you are going to use any form of adaptive instruction such as Dreambox, ST Math, i-Ready or Reasoning Mind. These are all really powerful, but it is important to decide whether you are going to use them because there are implications for both devices and the school model.

A few key questions to ask:

- Is there single sign-on?
- Is there combined reporting between products?
- Can you get a single standards-based grade book?

All of these are a little bit in the early days of blended learning, but what you should be looking for is single sign-on, great combined reporting and products that automatically draw data with visualization features.



Perspective from the Field: Data Visualization

Robin Wise, K12: We have a program called Goalbook that we use for progress monitoring. It visually graphs progress for us. We have been finding is that it is giving us usable data, not just graphing data.



Source: DigitalLearningNow.com

Which Device(s) Should You Use?

It's very important to really identify the student's individual needs when deciding on any technology. Device choices are pretty complicated for schools to consider, and they have very different pros and cons.

Laptops and web appliances like Chromebooks are much better at production, writing and video and have a bigger screen and a full keyboard. The downside is that they are more expensive and have shorter battery life. At the secondary level, laptops and Chromebooks are good for their production value and students use them for writing across the curriculum, but tablets are inexpensive.

Touch technology is very exciting, particularly for students with special needs. We have seen real promise for kids on the autism spectrum using touch apps.

	Laptop	Tablet
Pros	<ul style="list-style-type: none"> • Better at production activities • Larger screen, full keyboard 	<ul style="list-style-type: none"> • Cheaper • Touch-enabled • Engaging content • Instantly "on"
Cons	<ul style="list-style-type: none"> • More expensive • Shorter battery, longer boot-up 	<ul style="list-style-type: none"> • Not all web apps will run, weak app management • Not as powerful for production • Typing on screen • Small screen • Hard to write to text

Special Needs Considerations:

- Screen size
- Text to voice
- Touch enabled

Perspectives from the Field: Devices

Maria Carr, IEM: We are an independent study program really based with parent choice, so we look at the student's needs, but also consider the parents' comfort level with technology. For our specialized academic instruction, which is a time where a special ed teacher meets with the special ed student to support goals, we are using something called Blackboard Collaborate, with some of our students and that has been a great for students where it is a good fit.

As far as BYOD (Bring Your Own Device) for the special education population, the school is required to provide the device if there is a need in order to ensure Free Appropriate Public Education (FAPE).

Robin Wise, K12: We have a high free and reduced lunch population, so we provide all the equipment for our students as opposed to BYOD. We also have tablets available for some students in special education based on their needs.

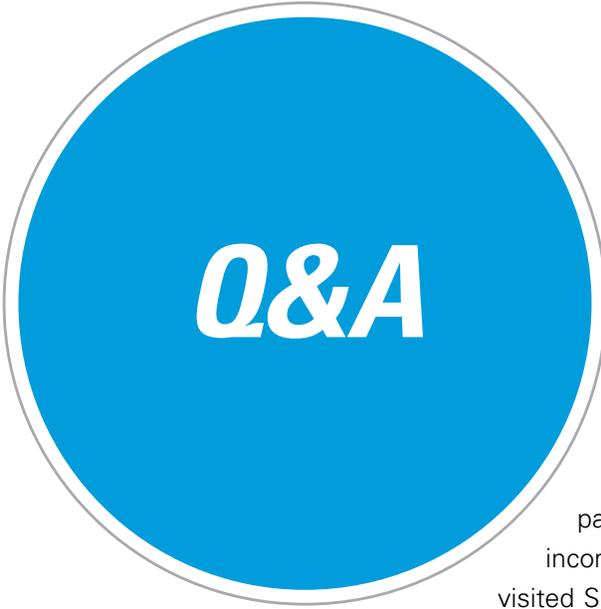
What About Staffing and Development?

Blended learning creates opportunities for teachers to work in teams. A very good extended discussion and this can be found at www.opportunityculture.org. It was produced by Public Impact and it describes 10 different strategies for extending the reach of great teachers. This is an important site and it has some implications for special education. It describes opportunities to differentiate roles and it encourages the sort of distributed staffing strategies discussed earlier in this paper. Teacher development, the exciting opportunity to move away from the old stand-and-deliver and use a combination of school-wide, team-based and individual learning, in effect gives every teacher and staff member their own individual development plan with a lot of on-demand content so that they can learn when and how they learn best.

Implementation can be a complicated project with lots of different responsibilities, and it is really important to have a good project manager. At the kickoff meeting, make sure the following is clear:

- Goals
- Who is responsible for what
- Timeline
- Budget

In using a program manager or program management office, make sure there are links between academics, technology, finance, special needs and communication. Finally, stay flexible because you will find things that don't work as well as you hoped; and it is important to make regular revisions to any blended learning program.



Q&A

Q&A

Question: *What research is there to support the efficacy of blended learning?*

Tom Vander Ark: There are three categories I am excited about. One is schools, the second one is studies, and the third is individual EdTech components. We've seen in the past 24 months all of the best school networks in the country incorporate blended learning with just phenomenal results. I visited Summit Public Schools in the Bay Area and I think they are the best high schools in the country and they have a very exciting blended model. I also visited with IDEA Public Schools in the Rio Grande Valley. They serve all low income Hispanic kids and they send them all to college, and they think they can do even better and they are incorporating blended learning strategies. Carpe Diem in Arizona is the top math school in the country and has really been a pioneer in blended learning. KIPP Schools have incorporated blended learning with great results. Mooresville Schools in North Carolina gets a lot of attention as an excited blended public district.

All over the country, we are seeing schools incorporate blended learning with really good results. That is starting to show up in the form of studies – there are hundreds of studies of the efficacy of blended learning in high school and college. It has been around the military and in the corporate setting for 20 years, and the studies are getting better the number of blended K-12 schools increases.

Finally, there are lots of particular components that have lots of data behind them. One example is ST Math, a visual, game-based approach to mathematics. K8 is particularly effective in an ELL setting since there are no words involved. Schools, studies and individual components are showing lots of promise, but I will end by saying we are in the early innings of developing new tools and new schools, so it's a combination of evidence and products that I think motivates a lot of us to develop and pilot new models.

Question: *What aspect in the virtual component of blended learning is the most helpful in serving students?*

Tom Vander Ark: I am really excited about adaptive learning and its potential for all kids, particularly for several categories of special needs, and likewise touch technology and mobile and the new apps that are being developed would be the second category that I am really excited about.

Robin Wise: I agree thoroughly with Tom. New technology as a daily part of your educational classes makes access for all students easier to implement. It's universal design at its finest because we have screen readers, we can do highlighting text, we can black out portions of the screen. There are so many things that can be easily integrated with an online learning system that would take a lot more work on the teacher's part that all students can have access to their learning with a computer, with the technology that we have at hand.

Maria Carr: Our children are digital natives. They've grown up with this technology and that is how they are learning. I really feel that blended learning really focuses and targets different instructions for students, especially the special education students. It really provides an engaging platform for them to learn and they get excited about it.

Question: *How are blended learning models described in students' IEPs?*

Robin Wise: I work specifically with our on-site in a brick and mortar five days a week. In our schools, it would look very much like a traditional brick and mortar IEP because our services are provided on-site. The only difference that you might see is our accommodation adaptations – we use a lot of online AP systems to provide student access – but as far as the location of the services that would be the same as the traditional brick and mortar.

Maria Carr: In California, we would not necessarily differentiate on the services on the page of an IEP if the students are being provided services through a blended model. We would indicate the name of the service, the frequency and the duration. We would just indicate the service, not the mode of delivery.

Question: *What do you indicate as the location on the IEP?*

Maria Carr: In California, the location would be indicated as a public school, or in my situation, it would be the charter school.

Robin Wise: We do the rotation as where location of services is going to take place. So within the flex model, we do have special education classrooms, and if the student does need very intense intervention, we do have a location in which those services are provided. Depending on what the student's needs are, the location could be the general education classroom or it could be the special education classroom.

Question: *What you think the key professional development considerations are for implementing a blended learning program?*

Tom Vander Ark: The key for school leaders is to identify teacher leaders and to leverage that teacher leadership. That may include starting with teachers that are ready to move and then providing really customized support for each teacher in the form of an individual development plan. There are platforms like BloomBoard, which is a group that I am on the board, that provides free individual development plans for educators and links those to lots of online resources. Using a platform like that, you can really provide on-demand support for every educator and if you combine really thoughtful team-based learning opportunities with individual learning opportunities and you phase this in at a thoughtful pace, you can help every educator be successful in a blended setting.

Question: *Can a blended learning program give special education students opportunities for practice, review and alternative learning? Can you give an example?*

Maria Carr: I would say wholeheartedly yes. We want to be able to differentiate the instruction for our special education students based on their individual needs and target their areas of weakness, so I would absolutely, absolutely say yes that blended learning would be a great option for special education students.

An example that Robin mentioned previously is using the data that we are able to collect for our progress monitoring. Having this on a daily basis really allows the teacher to see, "Okay this student is really struggling with this particular strand," and be able to drill down on what the student's needs are so they can have that a-ha moment.

Question: *What policies, practices and features of blended learning best motivate students to persevere and complete the blended learning courses?*

Tom Vander Ark: One thing that we are learning about online learning is that it works for many kids for many different reasons, but I think the vast majority of kids, 90%, are going to be most successful in a blended environment that provides a strong academic culture that is a mixture of high expectations and strong support. I think it really starts with a great school culture. Teachers that have high expectations and provide sophisticated web support for each student. Also repetitive learning and adaptive learning are two strategies that can boost persistence. A third factor is just flexibility. It is really developing an individual learning plan for every student and finding things that work. I think the biggest breaking news in the second half of this decade may come in this area of motivation, so the question about perseverance is very smart. I think once we build learner profiles, particularly motivational profiles, and become smarter about what kinds of experiences produce persistence and performance for each student, then we will be in a better position to develop a playlist, a sequence of experiences daily for every student to help them be successful.

Question: *What are some of the obstacles, especially cultural, that SPED leaders might encounter to implementing a blended learning model? How do you overcome these obstacles?*

Robin Wise: Well it's very interesting. Culture is one of my favorite topics, and my background when I was a teacher in the classroom for about 14 years was working with the mostly handicapped students and students who were on the spectrum, and getting those two particular groups of students to understand how to fit into a specific culture is very difficult. One thing that I have noticed – and the big difference in a blended learning environment – is that the students don't struggle like they do in a traditional school. They find their way because now they can work independently at their own speed; we don't have to do as much training on how to interact with others because we can have them working independently, but still have opportunities to work with students in a pullout classroom with students that are also in the same place they are in their education.

The cultural difficulties that we have seen with special education students in a traditional school are a less that we have to worry about because we are placing students in a live learning group and so the culture is naturally formed. The other piece that I love about a blended

school is that the cafeteria is no longer a terrible place for students to go. For so many years as a teacher, I had students not wanting to go to the cafeteria because they had no friends. They could not find anybody that they particularly could relate to, but now that we are placing students in groups based on their ability and what they need support with, students for the first time are finding friends and they want to go to the cafeteria. Students traditionally seen hiding out in the resource room in a traditional building now have friends for the first time. And I have seen that consistently amongst our four schools. It is very exciting that the culture changes.

About the Author

Tom Vander Ark is the author of *Getting Smart: How Digital Learning is Changing the World* and the CEO of Getting Smart, a education advocacy firm. He is Treasurer for the International Association for K-12 Online Learning (iNACOL), board chair of Charter Board Partners, and is a director of Bloomboard, Digital Learning Institute, Imagination Foundation and Strive for College. Tom is a national advisory board member for Communities In Schools, National Association for Charter School Authorizers (NACSA), and New Classrooms. He was the first Executive Director of Education for the Bill and Melinda Gates Foundation and previously served as a public school superintendent in Washington State.

About SPEDAhead Webinars

SPEDAhead webinars offer an opportunity for school administrators and special education specialists to catalyze discussions about new ideas and promising practices that help exceptional students achieve. With a series of free interactive online events and related multimedia web-based resources, we will explore answers to tough questions and shape effective leadership strategies for addressing special needs students' challenges for literacy skills, scholastic achievement and peer relationships.

About Presence Learning

PresenceLearning (www.presencelearning.com) is the leading provider of [online speech](#) and occupational therapy, counseling and assessments for K-12 districts and families of children with special needs. PresenceLearning's nationwide network includes hundreds of highly qualified speech language pathologists (SLPs), occupational therapists (OTs) and mental health professionals. Therapy sessions are delivered "anytime anywhere" via live videoconferencing using the latest in evidence-based practices combined with powerful progress reporting.

Serving thousands of students in public, charter and virtual schools across the U.S. and globally, PresenceLearning has shown that online delivery of related services is practical, convenient and highly effective.