



Lawrence Public Schools:

Disrupting the Factory Model with Blended Learning

AT A GLANCE:

Challenge:

Lawrence Public Schools sought to maximize teacher time with students and increase student engagement.

Solution:

Lawrence strategically implemented elementary, middle, and high school blended learning classrooms powered by Blackboard's innovative solutions.

Results:

Lawrence gathered overwhelming survey, assessment, and anecdotal evidence demonstrating improved student engagement and the maximization of teachers' time with students.

Challenge:

Limited Time and Waning Student Engagement

Lawrence Public Schools, in Kansas, serves nearly 12,000 students. To better serve its students and community, district leaders began investigating what the district could do differently to improve student success. To accomplish this goal, Lawrence articulated two questions for which to seek answers:

1. “Can we create and provide a resource that allows teachers to spend more time with their students?”
2. “Can we increase student engagement?”



Solution:

Blended Learning Powered by Blackboard

To answer these questions, Lawrence field tested blended learning, switching learning management systems (LMS) along the way to better serve the needs of their K-12 students and teachers with a solution that could continue to meet those needs as they evolved over time with program growth.

Under the leadership and vision of Dr. Angelique Kobler, assistant superintendent of teaching and learning, Lawrence investigated the answers to these questions with a strategic field test of blended learning from kindergarten through grade 12. According to the Christensen Institute, Blended learning is a formal education program in which a student learns:

- (1) at least in part through online learning, with some element of student control over time, place, path, and/or pace;
- (2) at least in part in a supervised brick-and-mortar location away from home;
- (3) and the modalities along each student’s learning path within a course or subject are connected to provide an integrated learning experience¹.

In spring 2013, Lawrence selected eight teachers to field test blended learning in kindergarten, grades four, five, six, and seven, and high school math. The field test results show potential, supporting the idea that blended learning could enable Lawrence schools to improve student engagement, better meet individual student needs, and raise the achievement of all students. Because Lawrence needed an LMS that would better serve the needs of its K-12 students and teachers as their needs evolved over time with program growth, Lawrence engaged in a formal review of several LMS platforms to find a simple and easy-to-use yet comprehensive solution that could meet their evolving needs over time.

In the formal LMS review, an evaluation committee unanimously chose Blackboard to power the district's innovation after teachers and principals found the platform user friendly, customizable, and comprising a mature set of features that could meet their needs—now and in the future. Additionally, the committee determined that the integration of the solution with the district's student information system, coupled with robust analytics tools, would help them identify areas where they could make proactive, data-driven decisions to enable student success.

"It was clear to us from the beginning that Blackboard knows K-12 education," says Kobler. "We had an immediate connection with their team, as they understood our needs and desire for flexibility. We felt that Blackboard embodied the spirit of K-12. This market insight was clearly used to design their product. We can easily see ourselves using it in our classrooms and parents using it to access academic information." For example, the committee saw value in the solution's mobile accessibility, as well as its flexibility in design and delivery of assessments to help teachers increase student engagement and closely support individual student needs.

"Blackboard was the only option we looked at that was drive-off-the-lot ready," says Kobler. "Some of the other options had features still in development. We needed a platform that fully supports the goals of our blended learning initiative now and in the future."



In fall 2013, after selecting Blackboard to power their innovative classrooms, the district opted to expand blended learning by funding 40 more blended learning classrooms, including at least two classrooms in each of the district's 20 school buildings. Due to high interest from teachers, individual schools chose to provide blending support funding for another 32 teachers, for a total of 80 blended learning classrooms across the district, from kindergarten through grade 12.

"It was clear to us from the beginning that Blackboard knows K-12 education,"

Dr. Angelique Kobler,

Assistant Superintendent of Teaching and Learning, Lawrence Public Schools

Blended Learning in Action

So what does blended learning look like in Lawrence?

Blended classrooms from kindergarten through grade 12 look very different than the traditional education model. When you walk into a blended elementary, middle, or high school classroom, you will not see individual student desks in straight rows facing the front, indicating a single source of knowledge in the classroom. You will not see quiet students and occasionally raised hands. You will not see anything resembling the traditional model of education stemming from the Carnegie unit. You will see something very different. You will see every student engaged, all the time, every day. You will see a competency-based approach to teaching and learning focused on student mastery of learning objectives, rather than seat time, where student success is the only option².

To realize this vision, Lawrence teachers creatively implement variations of the blended learning rotation model to meet each student's needs. A rotation model is a program in which, "within a given course or subject, students rotate between learning modalities, at least one of which is online learning. Other modalities might include activities such as small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments."³ The flipped classroom, station rotation, lab rotation, and individual rotation are all variations of the rotation model⁴.

At the elementary school level, for example, Lawrence teacher Paula Barr's second graders choose between watching flipped lessons, face time with the teacher, face time with another student in which students "teach" each other concepts, and working alone to learn the new concept. Barr has created instructional videos for the entire second grade math curriculum in Blackboard that students can access during class and at home. Reflecting upon her 30 years of traditional teaching, Barr says, "I was the only one talking in the room." Now, her second grade class motto is, **"The person who's talking is the person who's learning!"**



Innovative Classroom Example: Fifth Grade Roanoke History Mystery

Diana Bailey has created an innovative way to engage her fifth graders in social studies. Using Blackboard, she challenges her students to do their own detective work and provides them with multimedia clues and a detective journal, as well as useful links and resources for their investigation such as Google Earth or an Algonquin website for kids. Dressing the part, Bailey takes on a silly persona, such as her grandmother or a crazy cousin, and creates a fun reading video clue for each segment using Video Everywhere in Blackboard. The mystery is divided into four or five "Detective Agency Parts." For each segment, students must:

- Watch and listen to video reading, and take notes on clues
- Define vocabulary in their journals
- Review and complete a short detective [research] assignment

After each segment, students come to class and discuss their theories based on the clues and their research assignments in small groups before moving onto the next segment. After completing all segments using anonymous posting in Blackboard, each student posts the theory he thinks he can prove in a discussion. (Tip: A seasoned fifth grade teacher, Diana opted for anonymous posts in this step to prevent students from selecting the same theory as their friends to determine the debate teams.) In class, students are then grouped by theory and must debate their theories in front of the class. While voting happens in her face-to-face classroom now, Diana plans to have students vote on which theory team won and why in Blackboard.

Third grade teacher Jenni Wilk says her classroom looks like “organized chaos.” “Blended learning has really made my (third grade) students take control of their learning, and they all do it in different ways. If you were to come into my room, you would see some kids doing PowerPoint on a computer. You would see some kids doing research from books. You would see some kids doing an art project to show what they’ve learned on a particular topic, or you could see some kids making a video to share with the class in Blackboard. My students have taken control of their learning,” she says, “and they’ve figured out how they learn best.” A great example of how instruction has changed within her blended classroom is Wilk’s “Math Merry Go Round” strategy she employees once a

week. The activity involves four or five stations in which students use technology or a manipulative to learn a mini-lesson at each student-led station. For example, third graders lead stations on comparing fractions, equivalent fractions, adding and subtracting fractions, and converting fractions from improper to mixed numbers. Students who struggle the most with math gain confidence and success leading stations in the merry go round.

At the middle school level, Diana Bailey, fifth grade teacher, describes her classroom: “You’ll see multiple groups of kids around the room. Some students are sitting on pillows, and some are standing at whiteboards. You will see lots of discussions within the classroom. Some are in front of computers, and some are not. If you were standing

Lawrence Blended Learning Timeline

August – December 2012	Teaching & Learning Planning: What can we do differently to improve? Formed two key questions: <ul style="list-style-type: none">• Can we create and provide a resource that allows teachers to spend more time with their students?• Can we increase student engagement? Visited 40 classrooms seeking teachers with critical disposition (grit, perseverance, willingness to collaborate, unafraid to make mistakes)
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January – June 2013	Field Test (9 classrooms, K-12) with preliminary LMS Elementary: 4 classrooms Middle School: 3 classrooms High School: 2 classrooms
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May 2013	Formal LMS Evaluation
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June 2013	Selection of Blackboard Learn
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August 2013 – June 2014	Blended Learning Phase I Expansion (80 classrooms, K-12) Elementary: 62 classrooms Middle School: 11 classrooms High School: 7 classrooms 2-10 blended classrooms in each of the district’s 20 school buildings
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August 2014 – June 2015	Blended Learning Phase II Expansion (approximately 155 classrooms, K-12) <ul style="list-style-type: none">• District plans to add up to 97 more classrooms - some building supported classrooms will become district supported classroom• Building principals are expected to support additional classrooms• Lawrence estimates 200 blended classrooms for the 2014-2015 school year
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at the doorway, you would see kids actively involved in their learning.” In Bailey’s class, students choose how to demonstrate knowledge and skills by creating an iMovie, Prezi, or PowerPoint presentation to demonstrate Newton’s three laws. Alternatively, students can opt to draw pictures or use traditional writing. Bailey typically provides a list of options, but students can propose ideas to demonstrate learning, and nearly always, students share their work with the class through Blackboard discussions or shared journals. **“They really love to submit work on Blackboard and share work with other students. As soon as they finish, they want to share in Blackboard,”** Bailey says.

In Amanda Roenicke’s seventh grade class, students engage in learning standing up, sitting with peers, writing on the whiteboard, and in many other ways. “My dream classroom would be a flexible space, café style, with comfy couches and chairs, tall tables for standing, big screen areas, and white board spaces for collaboration,” Roenicke says.

Before blended learning, Danira Flores planned each of the 52 minutes she would spend with her high school algebra and pre-calculus classes each day. She would start by spending 20 minutes sequestering the entire class to review homework, re-explaining the previous day’s concept regardless of whether or not the review was needed by all students. Next, she would spend 15 to 20 minutes on the lecture for the day mandating that all students pay full attention to her lesson, again, regardless of where they were individually in terms of concept mastery.

Since implementing blended learning, Flores’s classroom has undergone an “extreme makeover,” she says. Instead of individual desks in straight rows facing the front, her room is filled with large, round tables; big-screen televisions; and an interactive whiteboard to foster collaboration. Instead of mandatory review followed by forced whole-class instruction, Flores lists three topics on the whiteboard that she will teach live in class each day. Around her classroom, students collaborate with

or without computers, or they opt to work with the teacher, alone, or interact with manipulatives on the interactive board based on their learning needs as they progress toward the learning objectives of the class. Walking into her classroom, it may even be difficult for an observer to identify the teacher. Instead of presenting at the whiteboard, Flores floats around the room, often kneeling in groups of students to coach them when they need it. Using the Video Everywhere feature in Blackboard, Flores has created a lecture capture for each lesson in her own private YouTube channel. She shares these flipped lessons with her students seamlessly

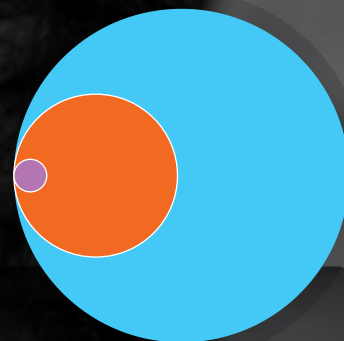


using Blackboard. “They make decisions about whether they want to hear a traditional lesson from me or decide to flip their lesson and watch videos,” Flores says. Even eliminating a traditional seating chart was a big step. She has truly transformed her classroom.

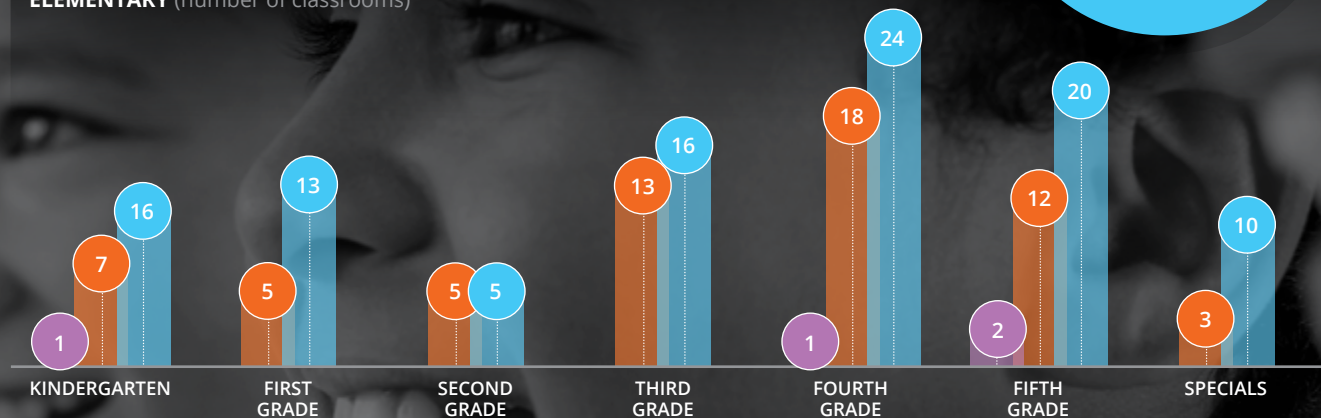
The phase one expansion in the 2013–2014 school year saw such success with Blackboard’s innovative classroom solutions that Lawrence plans to expand again in fall 2014. With increased student engagement; teacher efficacy; and positive feedback from students, teachers, and parents, the district will expand its support of blended learning by adding up to 97 more blended classrooms next school year.

Blended Learning Classroom Growth & Distribution

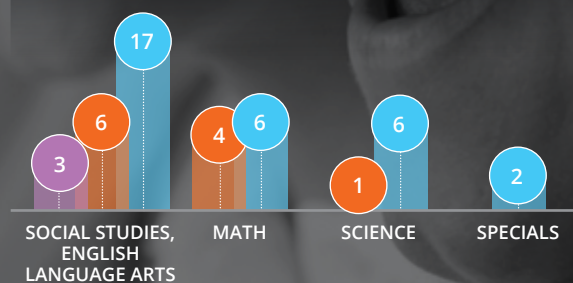
FIELD TEST: 9
PHASE I EXPANSION: 80
PHASE II EXPANSION: 154



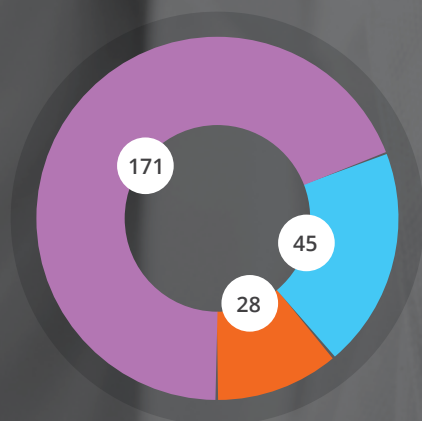
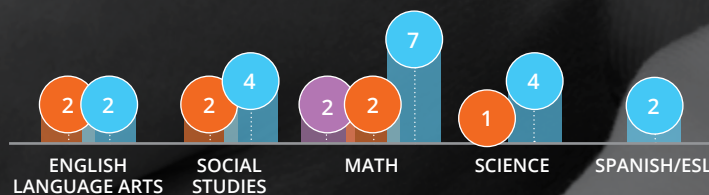
ELEMENTARY (number of classrooms)



MIDDLE SCHOOL (number of classrooms)



HIGH SCHOOL (number of classrooms)



	FIELD TEST	PHASE I	PHASE II
ELEMENTARY	4	63	104
MIDDLE	3	11	31
HIGH	2	7	19

Results:

The answers: yes, and yes!

Over the course of the field test and the phase one expansion, Lawrence gathered overwhelming evidence demonstrating improved student engagement and the maximization of teachers' time with students.

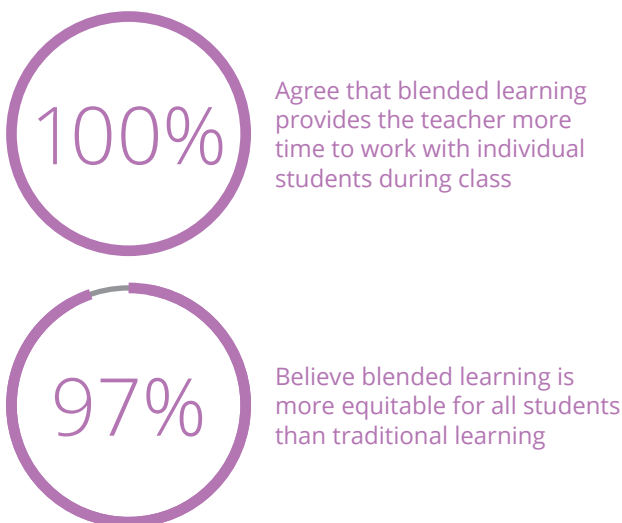
In answer to their questions:

1. "Can we create and provide a resource that allows teachers to spend more time with their students?" **No Problem.**

2. "Can we increase student engagement?" **Absolutely!**

Maximizing Teachers' Time With Students to Differentiate Instruction

Undoubtedly, blended learning has enabled Lawrence teachers to spend more time with their students and to differentiate instruction to meet each student's individual needs. In Spring 2014, Kobler captured the viewpoints of teachers implementing blended learning via a formal survey:



- 93% report that communication with students is more frequent and specific in a blended class
- 91% provide more immediate feedback to students in their blended classrooms
- 68% affirm that students with disabilities experience success in a blended learning environment
- 61% of teachers use Blackboard to "flip" lessons to enable differentiation
- 87% use Blackboard in their classrooms to work with individuals or small groups of students

Blended teachers have shared numerous examples of how they differentiate instruction more effectively in their blended classrooms. In Barr's second grade class, math and reading are completely individualized. Barr personalizes instruction based on each student's ability and progress toward learning objectives. She leverages her flipped lessons of the second grade math curriculum within Blackboard and other digital content assets such as Destination Math, Learn Zillion, and Kahn Academy during class time to help her differentiate and meet her students at their level. She has some students one-and-one-half to two instructional units behind where a typical second grader should be and other students who have just demonstrated mastery of instructional unit at the sixth grade level. In reading, she has students who are as many as eight months below grade level and students reading at the fifth grade level. With blended learning, Barr can support those students who need more attention, one to one or in small groups.

Teaching third grade traditionally and working with students in generalized level groups (below grade level, at grade level, and above grade level) for 30 minutes at a time, Wilk struggled to meet individual student's reading skills needs. Now, with blended learning, Wilk leverages data from the Measures of Academic Progress Assessment (MAP) to break students into groups. She spends just 10 to 15 minutes with small groups and can target specific word work and comprehension skills based on individual student needs. In Blackboard, her third

graders individually choose a concept identified by MAP on which to focus and choose a passage within their lexile range. They then engage in different activities designed to meet the targeted need, identified via data from the MAP assessment. Some examples of activities in which the students engage in Blackboard include comprehension and discussion questions, participation within discussion boards, contribution to a class wiki, or sharing a project with the rest of the class in a class blog (such as a story, a PowerPoint, or a video). **“In Blackboard, they each have their own blog, and that’s basically their space where they can post projects or stories that they’ve written, a PowerPoint, or anything interesting throughout the year that they’ve learned to share with their classmates. They read each other’s blogs and comment on each other’s posts,”** Wilk says.

Of course, students can opt to work with old-fashioned pencil and paper, as well. As an added benefit of blended learning, students choose to work with any other student or students in the room—not just one from their reading level group, such as in her former traditional classroom.

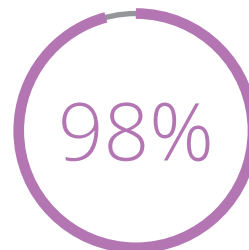
Bailey and Roenicke share examples of how differentiation in their blended classroom helps struggling and gifted students. In Bailey’s fifth grade classroom, reading strugglers used to hide, fearful of reading aloud in front of the class. But with blended learning, “They just go and get a laptop and listen to their story being read to them. They don’t look different than other students in their class. They really want to be at the same place as everyone,” Bailey says. **“I’ve seen kids working harder to be on grade level than before.”**

Like most seventh grade teachers, Roenicke has students at many different levels in class. For her, **“It is really inspiring for my gifted kids to be able to move at their own pace and for my struggling students to be able to access the content and**

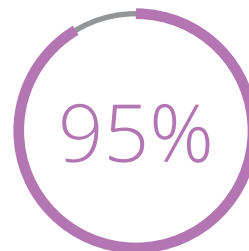
lessons at home [via Blackboard]. They come into class having already prepared and are then really super successful in class. They get a lot of pride and confidence from that.”

Improved Student Engagement

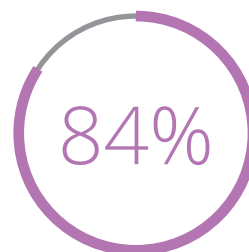
Lawrence has gathered overwhelming evidence documenting improved student engagement as a result of blended learning. **“The unsolicited response I get from teachers on student engagement specifically, you won’t believe,”** Kobler says. **“Many share that discipline has become a non-issue in their classrooms.”** Results from the Spring 2014 blended teacher survey show that:



Of teachers believe student engagement has increased



Believe students' attitudes have improved since implementing blended learning



Agree that students come to class better prepared for class

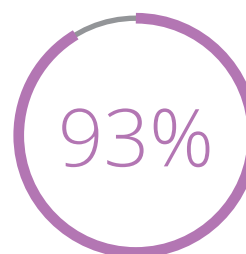
The anecdotal stories supporting improved student engagement are even better. With respect to her second graders, Barr reports, “They are more engaged. They’re more enthusiastic and excited about being at school. They’re taking their learning home. They often say, ‘I’m going to get on Blackboard at home and show this to my mom and dad.’” In his classroom, a second grader asked, **“Can I still get on Blackboard over the summer? I want to go back and do some things again.”** After visiting Barr’s class, a parent observed, “Every single student is engaged all the time, all day long.”

In third grade, Wilk reports, **“I had a parent at conferences tell me that their child used to cry when she had to come to school. And this year, she cries when she misses school.”** Wilk adds, “I think, for my students, they like having the freedom of choice and the empowerment that it gives them. I have had multiple parents comment on how safe their child feels in the classroom and how they feel like they’ve seen a big boost in confidence from their child.”

In Bailey’s fifth grade class, students routinely and eagerly arrive 35 or more minutes early. “I have students arrive at 7:30 in the morning, and school doesn’t start until 8:05. They eagerly come in and bring their breakfast sometimes. They begin math or any other lesson that they want to get ahead or with which to just get more time. They are fresh and ready to go.” **Even her students who cannot come to school due to illness often join class virtually via Blackboard to keep up and participate in discussions from home, even though virtual participation on a sick day is not required.**

At the high school level, Flores points out that her Algebra I students who struggle the most are often not the most motivated learners. For Danira, “I think the strongest demonstration of student engagement would be the fact that my students showed up after the school year ended to finish their learning of the standards that needed to

be learned for that year.” Eight reluctant learners from Flores’s Algebra I classes who had not yet mastered all required learning objectives for the year voluntarily chose to attend two additional weeks of class during the summer to complete their mastery of the subject. “The fact that they valued it enough to show up, I think speaks to the change in me. I mean, a traditional teacher says, ‘Oops, it’s summer. School is over. We’re done. So sorry you didn’t finish. Let me give you all the zeros for the stuff you didn’t do,’” reflects Flores. Because she was engaged with her students, she adds “I could see, that if given opportunity to learn and not be allowed to fail, my students would show up to learn. When they finally got that message, **‘You can’t fail, you’re not allowed to fail, because I won’t give up on you,’ that’s exactly what they did.**”



Report that blended learning has changed their approach to teaching.

Expert Blended Learning Advice for Teachers

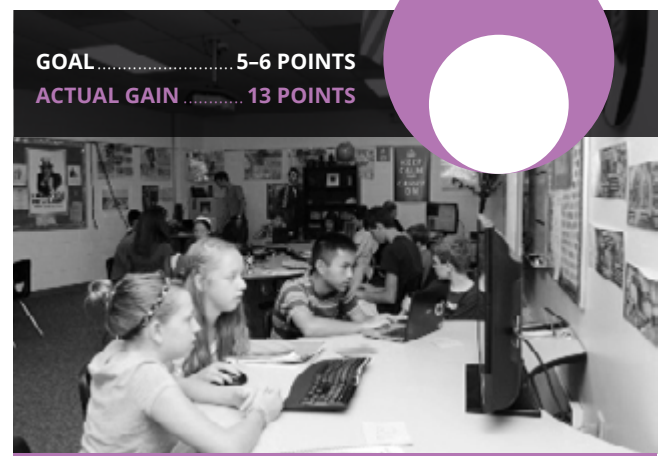
Teaching and learning has indeed changed for the better in Lawrence Public Schools, and their success can be replicated by other districts. Of Lawrence blended learning teachers, ninety-three percent report that blended learning has changed their approach to teaching. For Barr, a 32-year veteran teacher, the only difficult part of the transition to blended learning was the technology. Like many of today's teachers, Barr did not grow up with technology, so it has been a "learned step" for her—but well worth the effort. "Once I started changing the pedagogies and thinking of how I was going to teach the kids, it was easy because it was fun to think how to teach differently," Barr says. She advises new blenders to, "Go slow, but I know you'll jump right in like me." A 12-year teacher, Wilk encourages new blenders: "Do not be afraid." Bailey, an 11-year veteran, really enjoys her student-centered classroom and its benefits. To those venturing into blended learning, Bailey recommends, "Dive right in! Don't worry about mistakes." Roenicke says, "Just be flexible, it's very freeing. Take risks. For the first time in my career, I felt like I could make mistakes and that it was healthy to do so in front of my students." Danira Flores urges teachers to realize, "This did not happen overnight. We did not leave for Disneyland, come back on Monday, and everything fell magically in place. It took a lot of hard work. It took many hours of reflection on my part trying to figure out how we would change the norms in my classroom. The creation of those norms was a big leap on my part because it meant that I was giving up control."

Improved Student Achievement

With the combination of the ability to differentiate instruction to a degree never possible before blended learning and student engagement at an all-time high, early evidence regarding the impact on student achievement is very promising. Lawrence uses Northwest Evaluation Association Measures of Academic Progress Assessments to monitor to growth. In fifth grade math, for example, Lawrence teachers like to see students gain five to six points in a school year. At the end of the 2013-2014 school year, however, Therese Edgecomb's fifth grade class achieved an average gain of thirteen points! Results like this are fueling the excitement for and expansion of blended learning across the district. In reference to these results, Edgecomb says, "I truly feel that blending my classroom was a key ingredient in their success." Instead of counting the number of days until summer vacation, Edgecomb adds, **"I really don't want this year to end. We're having too much fun. But, I also cannot wait for next year!"**

Edgecomb 5th Grade Class NWEA Measures of Academic Progress Assessment Results

POINTS PER YEAR GAIN





How do elementary students use Blackboard in Lawrence?

- Watch and listen to teacher-created flipped lessons in and outside of classroom
- Share projects with their classmates through a blog (such as an iMovie, PowerPoint, story, or Prezi)
- Comment on classmates' work in a blog, wiki, or discussion
- Respond to writing prompts in wikis
- Capture and share video for their teacher or their class with Video Everywhere
- Access practice vocabulary or engage in remedial teacher-designed Quizlet activities
- Choose concepts and passages to work on to improve reading skills
- Respond to comprehension and discussion questions
- Participate in class discussion boards
- Listen to readings by their teachers
- Show projects, activities, and lessons to parents
- Access class materials from home outside of school time or in the summer
- Participate in class when home sick
- Collaborate with classmates to create and share videos for projects
- Create and publish videos for the class with Video Everywhere
- Take practice spelling quizzes (and other quizzes)
- Contribute to collaborative class wikis
- Access lessons and content to get started early before school starts in the morning
- Share learning over time via an open personal journal
- View history mystery videos, access investigative assignments to explore, post ideas in discussions, choose theories to prove via anonymous posts, defend theories in discussions
- Submit assignments
- Access SmartNotebook or other activities like SoftChalk shared by the teachers, and with which they interact by dragging, dropping, writing, sorting, matching, etc.
- Read aloud for their teachers capturing it with Video Everywhere
- Review graded work and feedback from their teachers
- Access and engage with remedial or enrichment digital content resources such as Kahn Academy or LearnZillion



K-12 Blackboard Innovative Teaching Series:
“Blended Learning: Disrupting the Factory Model”

> https://www.youtube.com/watch?v=Bg_S22CFnoQ

Lawrence Public Schools Blended Learning Initiative Page:

> <http://www.usd497.org/ParentsAndStudents/curriculum/BlendedLearning/>

Lawrence Public Schools Success Story Video (Coming Soon):

> [https://www.Lawrence Public Schools Success Story Video \(Coming Soon\)....](https://www.LawrencePublicSchoolsSuccessStoryVideo(ComingSoon)....)

END NOTES

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Blackboard.com