Teaching and Learning Updates

February, 2021

Debra Cooper, Director of Curriculum, Instruction and Assessment

Lisa Eldredge, Assistant Superintendent for Teaching and Learning Services

Elizabeth Kutchey, Assessment Coordinator, WIRED Coordinator, Summer of STEAM Coordinator

Extended Continuity of Learning Plan Report

February 4, 2021

Student Learning Options

January 11, 2021: Great Start Readiness Program, Head Start and Waterford Early Childhood Special Education Programs returned to in-person instruction.

January 19, 2021: Elementary remote students returned to in-person instruction.

February 1, 2021: Secondary remote students returned to in-person instruction.

WVA students who selected virtual as their option for second semester are enrolled and have begun classes.

Family Selections	In Person	WVA
Elementary	77%	23%
Middle School	74%	26%
High School	69%	31%

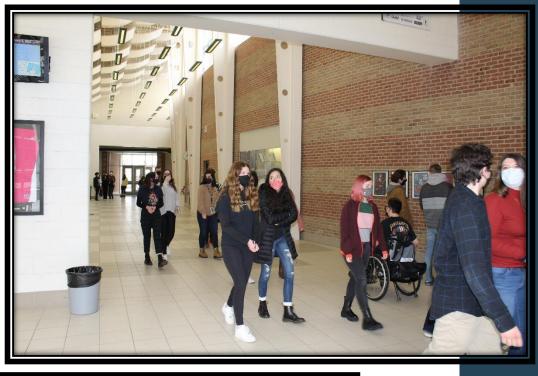
Engagement Report (through January 26, 2021)

	Elementary		Middle		High	
Enrollment as of date	Virtual	Remote	Virtual	Remote	Virtual	Remote
12/1/2020	643	2385	538	1129	759	1793
12/8/2020	640	2384	537	1129	758	1791
12/15/2020	640	2386	537	1128	758	1792
1/12/2021	640	2390	535	1127	758	1793
1/19/2021	640	2389	534	1125	758	1796
1/26/2021	640	2389	534	1127	756	1796

Week of	Eleme	entary	Middle	School	High S	School	All Students
	Virtual	Remote	Virtual	Remote	Virtual	Remote	
9/2-9/8	95%	97%	97%	96%	62%	94%	92%
9/9-9/15	97%	97%	80%	98%	66%	95%	92%
9/16-9/22	97%	96%	83%	99%	46%	96%	90%
9/23-9/29	98%	97%	86%	99%	51%	96%	92%
9/30-10/6	97%	98%	68%	99%	44%	95%	89%
10/7-10/13	97%	98%	56%	99%	52%	96%	89%
10/14-10/20	93%	99%	54%	99%	39%	95%	88%
10/21-10/27	95%	99%	63%	98%	34%	94%	88%
10/28-11/3	96%	99%	49%	98%	25%	92%	85%
11/4-11/10	94%	95%	58%	98%	30%	92%	85%
11/11-11/17	97%	96%	70%	97%	26%	93%	86%
11/18-11/24	96%	96%	72%	98%	32%	91%	87%
11/25-12/01	90%	94%	59%	96%	14%	84%	81%
12/02-12/08	96%	98%	76%	98%	36%	91%	88%
12/09-12/15	96%	97%	75%	98%	45%	91%	89%
01/06-01/12	96%	96%	59%	98%	33%	90%	86%
01/13-01/19	95%	96%	61%	99%	38%	91%	87%
01/20-01/26	95%	98%	65%	98%	47%	90%	88%

Welcome Back!!!









Immediate Needs

Student Learning Gaps (Core areas)

- Teachers are already meeting in PLC/CCT groups and in work groups to discuss student learning gaps and how to address them.
- This work will continue through the spring and summer.
- We are working to identify needs and set plans in place for instruction and interventions to address those needs, based upon collaborative data cycles and analysis of local assessments.
- We are looking at this in terms of our MTSS (tiered system of support) processes.
- We will be developing intervention programs to incorporate essential benchmarks and skills to address learning gaps for our students.
- Some of these intervention programs have started already, some will take place during the summer and most will continue through the course of next year.
- We will continue to monitor and adjust the interventions in order to maximize success.
- Interventions can be funded through 31a and Cares Act funding.

Problem Based Learning Initiative

Rethinking the Magnet Program

Magnet Program

- Implement rigorous, integrated curriculum
- Need to repurpose an elementary
- Accessible to a small number of students
- Access is adult driven
- Increased costs for transportation
- Grant funded costs for materials and training

Integrated Throughout WSD

- Implement rigorous, integrated curriculum
- Accessible to all students
- Greater impact on teaching and learning across the District
- Potential for every school and every grade to be involved in time
- Work with our curriculum revisions to revise instructional models at the same time with teachers
- Grant funded costs for materials and training

Proposal

- Integrate the Problem/Project-based (PBL) model to use critical thinking skills to apply learned skills as part of the District's curriculum
- Work alongside teachers to develop a rollout plan which will include professional learning, curriculum integration and process
- In keeping with the idea that STEAM touches every curricular area, create a PBL room at each elementary building which includes materials to support and build upon the creation and development of projects, demonstrations of learning and problem solving skills
- Enhance the STEAM materials at the middle school level to support the rollout of PBL at that level as well
- Promote the continued growth of complex problem solving skills and collaboration across our middle school grade levels

What is PBL

Mokshapat









What is PBL?











What does the Research Say?

- These inquiry based teaching methods engage students in creating, questioning, and revising knowledge, while developing their critical thinking, collaboration, communication, reasoning, synthesis and resilience (Baron and Darling-Hammond, 2008).
- Studies comparing learning outcomes for students taught via project-based learning versus traditional instruction show that when implemented well, PBL increases long-term retention of content, helps students perform as well as or better than traditional learners in high-stakes tests, improves problem-solving and collaboration skills, and improves students' attitudes toward learning (Strobel and van Barneveld, 2009; Walker and Leary, 2009).
- The problem-based learner tends to develop mental patterns that are highly connected to the richness of the problem situation. Such understanding is highly integrated and linked to a variety of real-world situations, perspectives, disciplines, etc. Such learners are able to answer essay questions not only in terms of the definition of terms; they are able to elaborate on the meaning of important ideas and add nuances that are connected to the real world. This is so, not because they have read about those connections, but because they have experienced the connections firsthand (Musial and Hammerman, 1997).
- Students learn more deeply when they can apply classroom-gathered knowledge to real-world problems, and when they to take part in projects that require sustained engagement and collaboration. Active learning practices have a more significant impact on student performance than any other variable, including student background and prior achievement (Baron and Darling- Hammond, 2008).

Context Matters

- Not an all or nothing situation. PBL will not become our sole method of instruction but it can help a student to apply the skills he/she learns into a meaningful, engaging project. Every instructional method has a place. It's about finding the right balance to make learning accessible to all.
- Students still need to learn the skills they will use in PBL.
 One cannot effectively exist without the other.
- Not all problems require groups. Some can be independent.
- Engagement is a core attribute of PBL.

Why PBL Alongside STEAM?

STEAM is the what, and incorporates just about every content area. PBL is the how.

Research shows that PBL, when implemented effectively can have a significant impact on:

- 21st Century Skills
- Students' ability to think critically
- Students' ability to problem solve
- Students' ability to communicate effectively
- Students' ability to develop and grow effective decision making skills
- Standardized test scores

Virtual Learning, Fall 2021

Considerations for Planning (Previous laws, which were suspended this year, will be reinstated for the fall):

- Platforms to be used by grade level
- Teacher involvement
- Synchronous vs asynchronous
- Rigorous and appropriate instruction and assessment
- Cost of Platform
- Cost of staffing: instructional, administrative, counseling, clerical
- Enrollment timeline
- Criteria for enrollment
- Commitment to the program: District and families
- Development of program

- Implementation of program
- 5OD laws and their impact
- Attendance
- Seat time options
- Technology and tech support needs
- Supporting diverse learners in a remote setting
- Eligibility for sports, clubs, the arts
- Supplemental materials
- Coordination of services: food, OSTC, co-op
- School accountability, school improvement, Educational Entity Master coding, State testing, AP audits

Timeline Options

With District Virtual Program

Spring/Summer/Fall 2021: Develop and implement, with teacher support, interventions and curriculum essentials to support student learning gaps. Continue to develop supports for students with social and emotional learning in light of the pandemic.

Develop and implement a virtual program to open for the 2021-22 school year.

Winter/Spring/Summer 2022: Form work team and determine a specific timeline for rollout for PBL. Begin training in PBL, work on curriculum alignment and integration with curriculum revisions

2022/23 School Year: Begin PBL Implementation based on rollout plans developed in collaboration with instructional staff

As Originally Planned

Spring/Summer/Fall 2021: Develop and implement, with teacher support, interventions and curriculum essentials to support student learning gaps. Continue to develop supports for students with social and emotional learning in light of the pandemic.

Identify work teams and determine a specific timeline for rollout for PBL. Begin training in PBL, work on curriculum alignment and integration with curriculum revisions

Winter/Spring: Begin PBL Implementation based on rollout plans developed in collaboration with instructional staff- by grade level, by content area, by school

English Language Arts

PROGRAMS TO SUPPORT EARLY LITERACY SUCCESS



HEGGERTY

A research-based, 35week curriculum of daily phonemic awareness lessons for students in grades JK-1

- Phonemic awareness is the ability to understand that spoken words are made up of individual sounds called phonemes
- Phonemic awareness is one of the best early predictors for reading success
- Heggerty lessons are designed for a classroom setting, and only take 10-12 minutes
- Heggerty lessons are easy to follow, include teacher directions for each skill, and require minimal prep time

Heggerty Timeline:

2019-2020

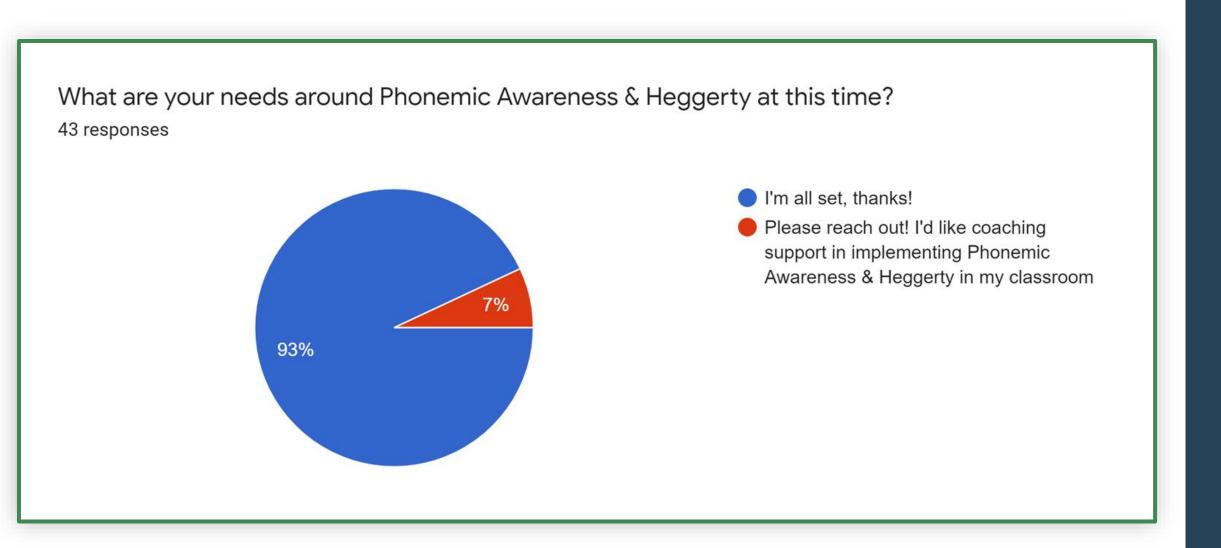
- Provided phonemic awareness professional learning & Heggerty training for JK-1 classroom teachers & reading interventionists
- Purchased Heggerty materials for JK-K classroom teachers
- Collected JK-K baseline and middle of year phonemic awareness data
- Engaged in a data dig, using the district data cycle process, with building kindergarten PLCs

Heggerty Timeline (cont'd):

2020-2021

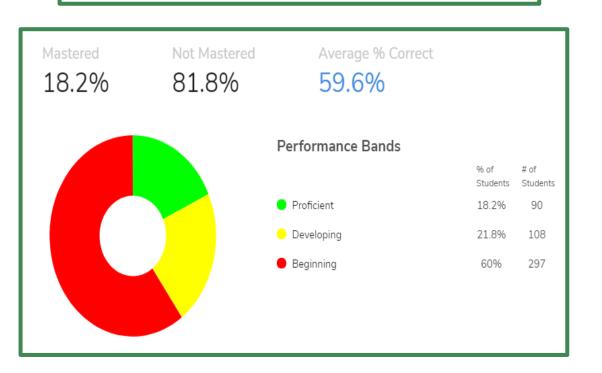
- Provided a phonemic awareness professional learning and Heggerty training asynchronous module for JK-1 & special education classroom teachers
- Invited staff to collaborate with an instructional coach to support implementation of the Heggerty lessons
- Purchased Heggerty remote materials for JK-1 & special education classroom teachers
- Purchased Heggerty Bridge The Gap materials for reading interventionists
- Elicited stakeholder feedback

STAKEHOLDER FEEDBACK

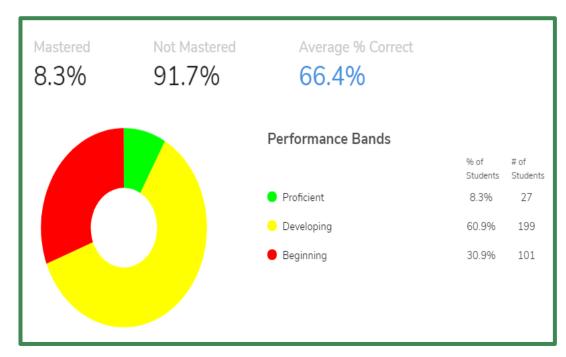


STUDENT DATA

2019-2020 Heggerty Phonemic Awareness - Kindergarten

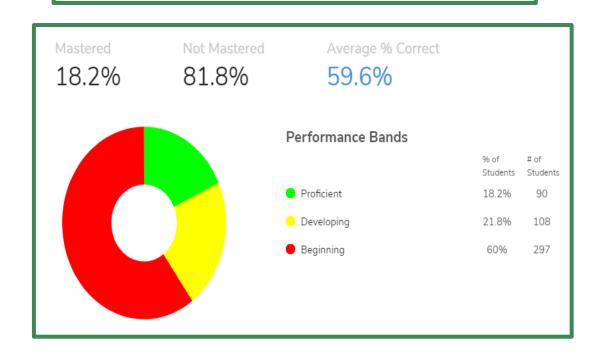


2020-2021 Heggerty Phonemic Awareness - Kindergarten

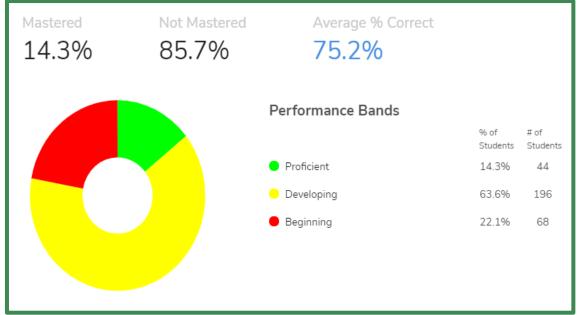


STUDENT DATA

2019-2020 Heggerty Phonemic Awareness - Kindergarten

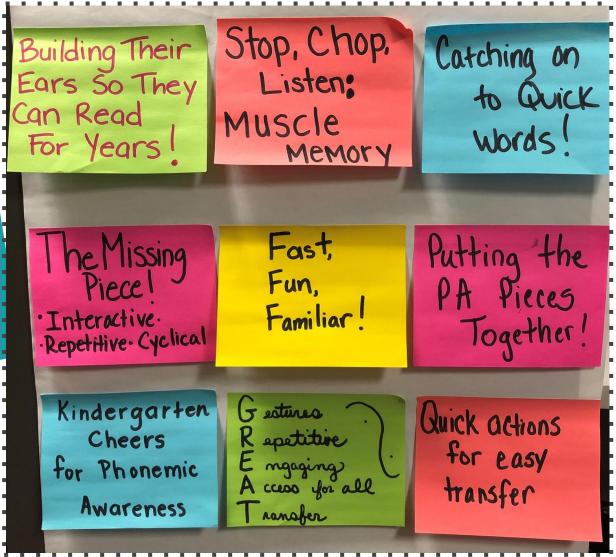


2020-2021 Heggerty Phonemic Awareness - First Grade



KINDERGARTEN HEGGERTY HEADLINES!





PROGRAMS TO SUPPORT EARLY LITERACY SUCCESS

LEXIA CORE5

A research-proven computer program for students in grade JK-5 that provides explicit, systematic, personalized learning in the six areas of reading



- The activities build on classroom curriculum and focus on developing reading skills in six areas: phonological awareness, phonics, structural analysis, fluency, vocabulary, and comprehension
- Incorporates technology to give students more control of the place, pace and path of their learning
- Real-time student data is available without a test
- Students can monitor their usage and unit progress at login and logout

Lexia Core5 Timeline

2018-2019:

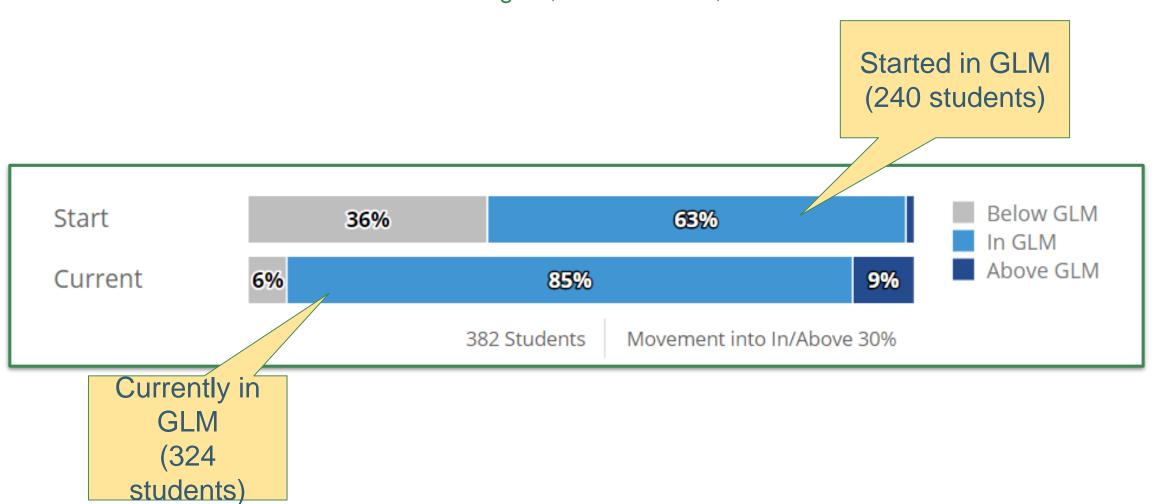
- Targeted, before school program for students below the 30th percentile
- Purchased 270 Lexia Core5 licenses (30 licenses for each elementary) for a before school intervention program

2019-2021:

- Invited students & families to utilize Lexia Core5 (for free!) beginning in March and ending in August
- Utilized Lexia Core5 in July and August in virtual SLAM
- Purchased unlimited licenses for use during the 20-21 school year
- Engaged in Schoolwide Lexia data cycles to increase student usage and progress

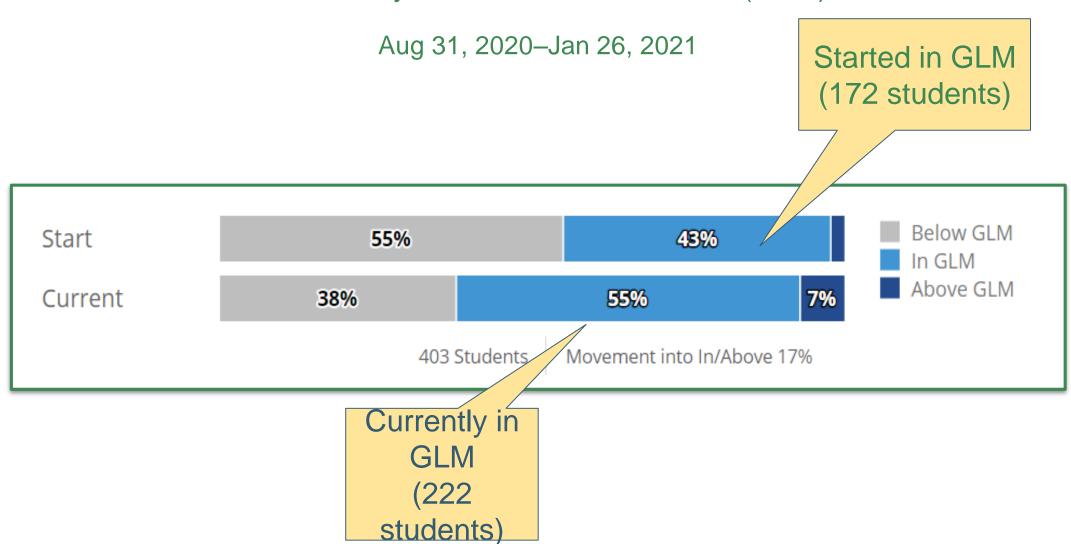
LEXIA CORE5 KINDERGARTEN DATA

Students by Grade Level of Material (GLM) Aug 31, 2020–Jan 26, 2021

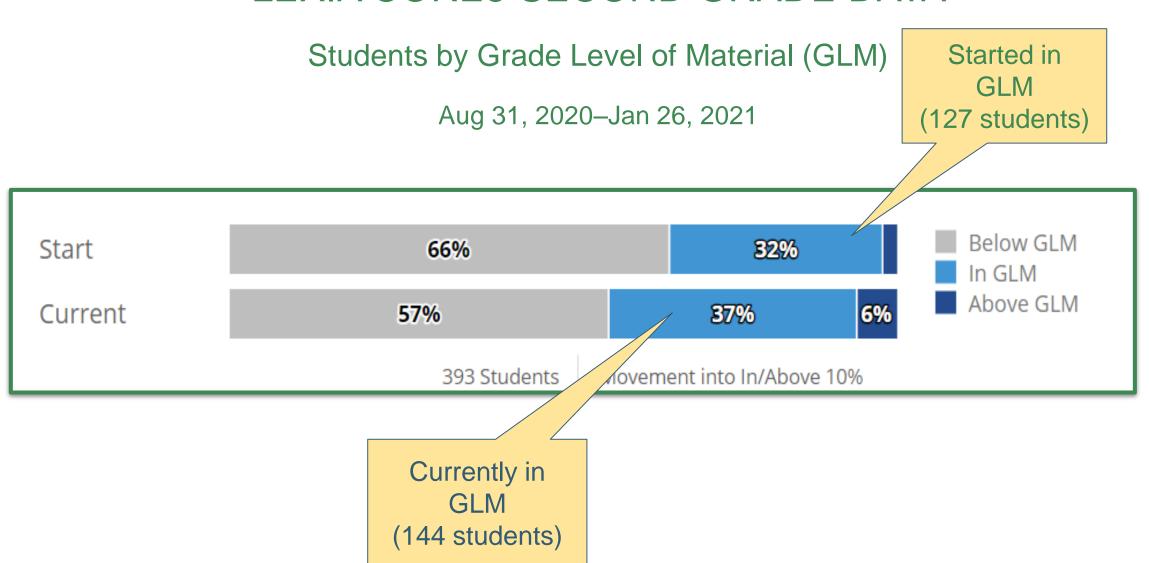


LEXIA CORE5 FIRST GRADE DATA

Students by Grade Level of Material (GLM)



LEXIA CORE5 SECOND GRADE DATA



Reach out with questions!

Shannon Pathe pathes01@wsdmi.org

Chris Cyporyn cyporc01@wsdmi.org

Lauren Wiseman janisl01@wsdmi.org

Meghan Macy callam01@wsdmi.org









Purpose and Direction

- Review of data demonstrates the need to examine the curriculum
- College Board Data Dig: Summer of 2019
- Met with ELA teachers to solicit their concerns: Fall 2020
- Met with Middle School Administration regarding needs/materials
- Goal meet within a committee structure and form leveled study to chart the course for review work
 - Research best practice and alignment with standards
 - Collect comparative data regarding units of study and materials
 - Launch committee work with identified staff and administration

SAT Data 11th Grade ELA Benchmark Results

SAT (11th)	Percentage Met/Exceeded ERW Benchmarks			
	2018-2019	2017-2018	2016-2017	
Durant	7%	6%	16%	
Kettering	49%	52%	59%	
Mott	38%	40%	50%	
District	40%	44%	53%	
State	55%	58%	60%	
Sub-Groups				
African American	31%	33%	26%	
English Learners	6%	14%	8%	
Hispanic	20%	24%	32%	
Special Education	3%	0%	9%	

SAT/NMSQT Data: 11th Grade ELA Results Fall 2020 (optional test due to COVID-19)

2020- 2021*	Total Tested	Mean Total Score	Mean ERW Score			
		400-1600	200-800			
Kettering	86	1012	519			
Mott	73	958	499			
District	162	987	510			
State		1027	522			
Global		1041	529			
			Essay Score (2-8)			
		Percentage Met ERW Benchmark (480)	Mean Reading Score	Mean Analysis Score	Mean Writing Score	
Kettering		69%	5	3	5	
Mott		56%	4	3	5	
District		63%	4	3	5	
State		66%	4	3	5	
Global		67%	4	3	5	

PSAT Data: 10th Grade ELA Benchmark Results

DCAT 40	Davasata as N	Ast/Cycocodod CDW/Dono	h			
PSAT 10	Percentage	Percentage Met/Exceeded ERW Benchmarks				
	2018-2019	2017-2018	2016-2017			
Durant	21%	21%	11%			
Kettering	51%	54%	60%			
Mott	42%	49%	50%			
District	46%	51%	54%			
State	59%	61%	63%			
Sub-Groups						
African American	26%	36%	43%			
English Learners	11%	14%	31%			
Hispanic	31%	36%	40%			
Special Education	15%	10%	0%			

PSAT Data: 9th Grade ELA Benchmark Results

PSAT 9	Percentage Met/Exceeded ERW Benchmarks				
	2018-2019	2017-2018	2016-2017		
Kettering	54%	55%	59%		
Mott	47%	46%	54%		
District	50%	51%	57%		
State	61%	61%	61%		
Sub-Groups					
African American	30%	23%	33%		
English Learners	22%	20%	11%		
Hispanic	41%	43%	35%		
Special Education	10%	23%	11%		

PSAT Data: 8th Grade ELA Benchmark Results

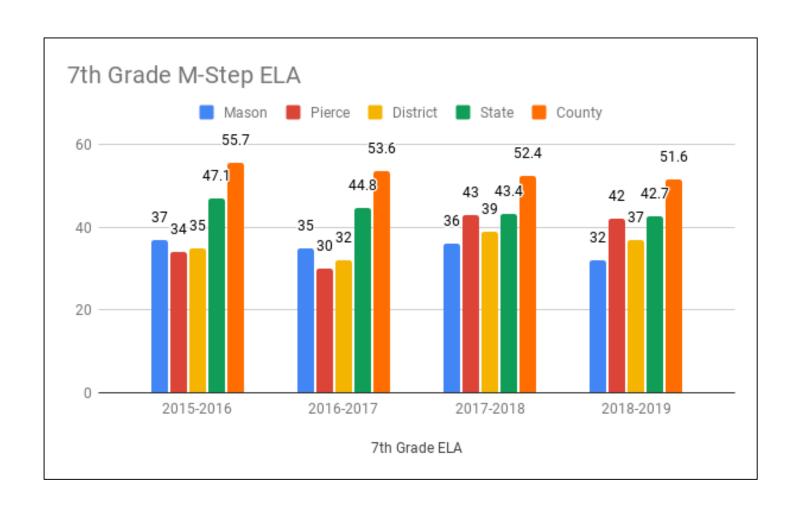
PSAT 8	Percentage Met/Exceeded ERW Benchmarks
	2018-2019
Mason	48%
Pierce	52%
District	50%
State	62%
Sub-Groups	
African American	24%
English Learners	11%
Hispanic	33%
Special Education	14%

Cohorts: ELA College Board Benchmark

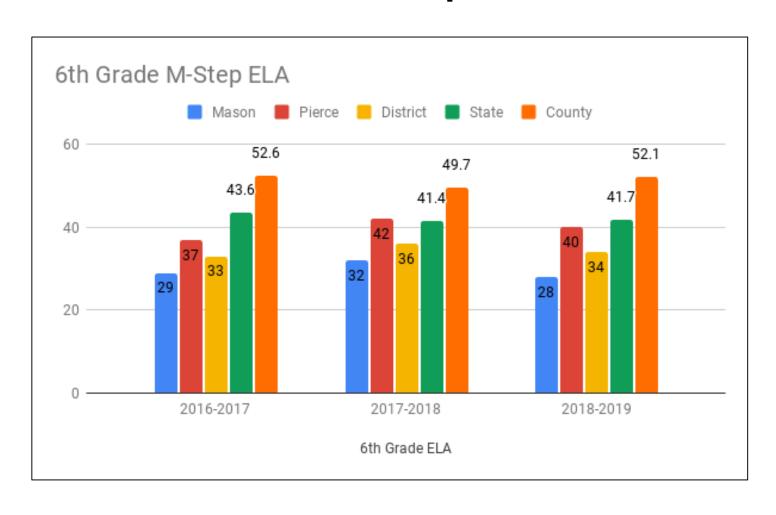
Results

	Class of 2021	Class of 2022	Class of 2023
Durant			
1	N/A	Pending	Future
10	21% (S=59%)	N/A	Pending
Ç	N/A	N/A	N/A
Kettering			
1	N/A	Pending	Future
10	51% (S=59%)	N/A	Pending
Ç	55% (S=61%)	54% (S=61%)	N/A
}	N/A	N/A	D=50% (S=62%)
Mott			
1	N/A	Pending	Future
10	42% (S=59%)	N/A	Pending
C	46% (S=61%)	47% (S=61%)	N/A
3	N/A	N/A	D=50% (S=62%)

Previous ELA M-Step Data: 7th Grade



Previous ELA M-Step Data: 6th Grade



Mathematics

Elementary Math Update: enVision 2020

- enVision 2020 Math takes <u>problem-based learning</u> and pairs it with <u>visual learning</u> to deepen students' conceptual understanding.
 There is a large focus on students' needs with intervention activities and resources for all learning levels.
- All lesson components of enVision Math can be accessed digitally by students and teachers!
- Teachers are feeling more supported with the program resources and enVision-based PD/training.



Elementary Math Professional Development Opportunities

August: Activation training

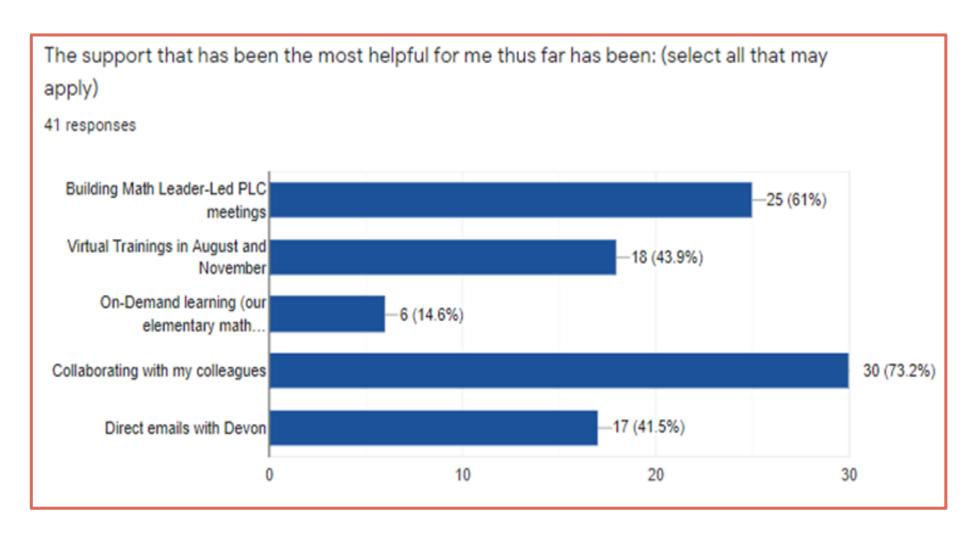
November: Assessments and Data Digging

Monthly: K-2/3-5 PLC meetings led by Building Math Leaders introducing monthly goals

Ongoing: Individual Lesson Analysis with Devon McKee
On-Demand Learning from SAVVAS
Individual and building-wide data cycles



Professional Development Survey

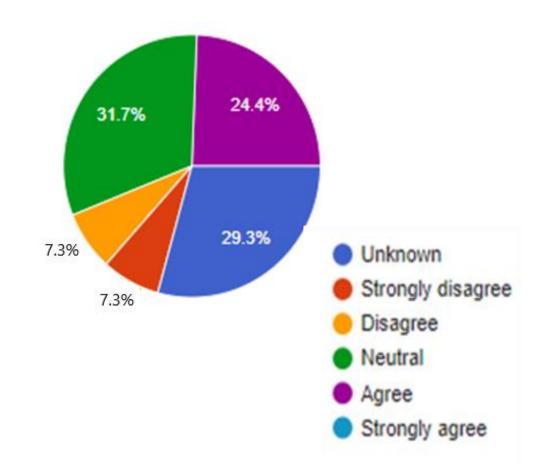


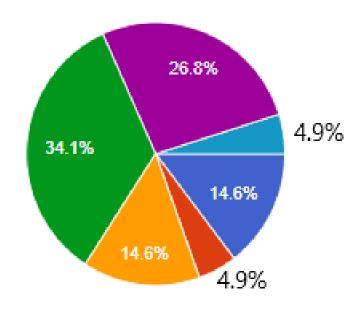
Survey Results

Parents/Adults have expressed they like enVision math

41 responses

Students have expressed they like enVision math 41 responses





Survey Results:

Stakeholders Appreciate:

- Workbooks (easy to follow, convenient, completed examples for students to use as guides, students can complete pages if they were absent)
- Online features like videos, games, writing/drawing directly on the pages, extra practice, and digital math manipulatives/tools
- Seamless Google Classroom integration
- Smartphone "Bounce" App for visual learning videos without needing to login
- Content is challenging

Challenges for Stakeholders:

- Content can be too challenging at times
- More story and word problems than students have seen in prior program
- Fact fluency and number sense is an expectation of enVision and is an area of need/improvement
- New problem solving strategies and methods that students are not used to
- Reading level is higher than where are students currently are

Next Steps:

- The pacing guide for second semester has been updated for each grade level with recommendations by building on how to proceed, ensuring that students will receive instruction on critical areas/priority content needed for the next grade level.
- In-Person learning will have a dedicated focus on enVision program components that are more successful in person: Pick-a-Project, STEM Activities, PBL Reading Mats, 3-ACT Math Tasks, and Today's Challenge problems. Teachers will also increase the us of the MDIS intervention kit
- This spring/early summer, 21-22 Curriculum Planning and Assessment Committees will meet with a focus on next year's pacing/curriculum map and unit assessments that best meet student need

Elementary Math Update: SuccessMaker

Benefits:

- Adaptive learning and practice on areas of need identified for each student individually.
- Activities support and build on classroom enVision math curriculum.
- Great tool for quarantined families to continue self-paced learning at home
- Available for all JK-5 students, including WVA

Staff Professional Learning Opportunities:

- September/October: activation training by building
- November: Data reporting training
- December: Increasing Engagement and Student Buy-In
- Ongoing: On-demand training and resources through SAVVAS



SuccessMaker Data (10/19/20-1/26/21)

- Number of Active Students: 2270 students
- Average Time Active (per student): 2 hours and 22 minutes (suggested minimum of 45 minutes per week)
- Average Academic Gain: 0.13 (Expected .10-.15 gains)
- Average # of Skills Mastered with >90% completion score: 25 skills
- Students using the program regularly are on a trajectory to make one year's growth by June

Secondary Math Update: College Prep Math (CPM)

Where we are now:

Collaborative Learning

Research says students learn ideas more deeply when they discuss ideas with classmates.

Problem-Based Learning

Research says students learn ideas more usefully for other arenas when they learn by attacking problems.

Mixed, Spaced Practice

Research says students learn ideas more permanently when they are required to engage and re-engage with those ideas for months or even years.

Professional Learning and Teacher Supports:

Phase 1 Workshops (8-10 sessions): Team Strategies and Lesson Structure

Phase 2 Workshops (6-8 sessions): Effective Questioning Techniques and Student Engagement

Phase 3 Workshops (5-6 sessions): Quality Chapter and Summative Assessments

Ongoing: On-Demand webinars and bi-monthly newsletters

Bi-yearly implementation mentoring via email and classroom visits/coaching

Chapter-based lesson planning led by CPM Curriculum Specialists

Waterford Google Classroom for staff members and WSD Google Drive for on-demand

Professional Learning

2017 PSAT 9: Year One Year Prior to CPM implementation

Overall Math Section					
Average Score Percentage Pe					
Kettering	419	34%	14%	52%	
Mott	405	26%	16%	58%	
WSD	412	30%	15%	55%	

(2020 PSAT 10 was not administered due to Covid-19)

Cohort increase in overall math score

2020 Fall SAT 11: Year 3 of CPM implementation

Overall Math Section						
	Average Score (Range: 200-800)		Percentage Met/Exceeded Aath Benchmarks	Percentage Met/Approaching	Percentage Need to Strengthen Skills	
Kettering	460 +41		25%	10%	64%	
Mott	458 +53		35%	6%	59%	
Durant	NA		NA	NA	NA	
WSD	458 +46		29%	8%	63%	

2018 PSAT 9: One Year Prior to CPM Implementation

Overall Math Section						
Average Score Percentage Pe						
Kettering	416	33%	10%	57%		
Mott	401	28%	9%	63%		
WSD	409	31%	10%	60%		

2019 PSAT 10: Year One of CPM Implementation

Cohort increase in overall math score

	Overall Math Section					
	Average Score (Range: 120-720)	Percentage Met/Exceeded Math Benchmarks	Percentage Met/Approaching	Percentage Need to Strengthen Skills		
Kettering	424 +8	21%	10%	68%		
Mott	414 +13	16%	12%	72%		
Durant	344 NA	0%	0%	100%		
WSD	418 +9	18%	11%	71%		

(2020 SAT 11 was not administered due to Covid-19)

2017 PSAT 9: Two Years Prior to CPM Implementation

Overall Math Section					
Average Score					
Kettering	419	34%	14%	52%	
Mott	405	26%	16%	58%	
WSD	412	30%	15%	55%	

2018 PSAT 9: One Year Prior to CPM Implementation

†	Overall Math Section					
Average Score Percentage Pe						
Kettering	416	33%	10%	57%		
Mott	401	28%	9%	63%		
WSD	409	31%	10%	60%		

2019 PSAT 9: Year One of CPM Implementation

Overall Math Section					
Average Score Range: 120-720) Percentage Met/Exceeded Percentage Percentage Need Math Benchmarks Met/Approaching to Strengthen Skil					
Kettering	413	31%	9%	59%	
Mott	396	27%	5%	67%	
WSD	403	29%	7%	64%	

2017 PSAT 10: Two Years Prior to CPM

Overall Math Section						
Average Score						
Kettering	444	30%	14%	56%		
Mott	421	20%	12%	67%		
Durant	383	4%	7%	89%		
WSD	431	25%	13%	62%		

2018 PSAT 10: One Year Prior to CPM

	Average Score (Range: 120-720)	Percentage Met/Exceeded Math Benchmarks	Percentage Met/Approaching	Percentage Need to Strengthen Skills	
Kettering	432	24%	15%	61%	
Mott	414	20%	10%	69%	
Durant	365	0%	13%	88%	
WSD	423	22%	13%	65%	

2019 PSAT 10: Year One of CPM Implementation

	Average Score (Range: 120-720)	Percentage Met/Exceeded Math Benchmarks	Percentage Met/Approaching	Percentage Need to Strengthen Skills
Kettering	424	21%	10%	68%
Mott	414	16%	12%	72%
Durant	344	0%	0%	100%
WSD	418	18%	11%	71%

2017 SAT 11: Two Years Prior to CPM Implementation

Overall Math Section							
	Average Score (Range: 120-720)	Percentage Met/Exceeded Math Benchmarks	Percentage Met/Approaching	Percentage Need to Strengthen Skills			
Kettering	502	38%	13%	49%			
Mott	463	23%	8%	70%			
Durant	404	3%	3%	94%			
WSD	477	29%	10%	62%			

2018 SAT 11: One Year Prior to CPM Implementation

	Average Score (Range: 120-720)	Percentage Met/Exceeded Math Benchmarks	Percentage Met/Approaching	Percentage Need to Strengthen Skills
Kettering	474	30%	8%	61%
Mott	450	19%	8%	73%
Durant	379	0%	0%	100%
WSD	458	23%	8%	69%

2019 SAT 11: Year One of CPM Implementation

	Average Score (Range: 120-720)	Percentage Met/Exceeded Math Benchmarks	Percentage Met/Approaching	Percentage Need to Strengthen Skills
Kettering	465	23%	7%	70%
Mott	439	19%	7%	75%
Durant	376	0%	0%	100%
WSD	445	19%	6%	75%

Next Steps:

- The pacing guide for second semester has been updated for each course with recommendations by building on how to proceed, ensuring that students will receive instruction on critical areas/priority content needed for the next grade level.
- In-Person learning will have a dedicated focus on continuing team cooperative learning and collaborative engagement, problem-based learning, and mixed, spaced practice with first semester content.
- This spring/early summer, 21-22 Curriculum Planning Committees will meet with a focus on next year's pacing/curriculum map that best meet student need and critical areas for graduation
- 6-12 Math teachers will be invited to the April CCT meeting for a data dig on benchmarks based on College Board data

Reach out with questions to Devon McKee (math consultant) at BucknD01@wsdmi.org

March 4, 2021

- Career Focused Education
- Grading Committee
- Secondary Social Studies
- Student Support Services