

MILLERSBURG AREA SCHOOL DISTRICT



3-YEAR ACADEMIC PERFORMANCE REPORT (School Years 2013-14 through 2015-16)

PRESENTED BY:

THOMAS HAUPT, SUPERINTENDENT

**KIM SAUERS, DIRECTOR OF CURRICULUM, INSTRUCTION &
ASSESSMENT**

**MARCH 27, 2017 (BOARD AND CURRICULUM PLANNERS)
MAY 12, 2017 (K-12 FACULTY)**

MILLERSBURG AREA SCHOOL DISTRICT

Vision Statement



The vision of Millersburg Area School District is to provide an educational program that **empowers students** to reach their full potential, to become valued community members, and to be productive citizens.

MILLERSBURG AREA SCHOOL DISTRICT

Mission Statement



Through parental, student, district, and community efforts toward excellence, the mission of the Millersburg Area School District is to educate all students to be responsible citizens who **perform academically**, think critically, and respond morally to a rapidly changing, highly competitive world. Provided with the necessary skills and with a comprehensive educational process, graduates will meet the challenges with the abilities to adapt while mutually respecting thoughts and ideas of others.

Presentation Overview



- Administrative review, led by Mr. Sauers, in the following three areas:
 - Curriculum review/alignment
 - Development of career clusters
 - Enhancing our online learning opportunities (I-Link)
- Data sources utilized in this presentation*
 - PSSA in ELA and Math grades 3 - 8
 - PSSA in Science grades 4 and 8
 - Keystone assessments
 - Algebra 1
 - Biology
 - Literature
 - School Performance Profiles (SPP) which are primarily a measure of student achievement and growth with various other indicators
- District's tuition rate over the past three years
- Millersburg's student achievement compared to others:
 - County (Dauphin County)
 - Intermediate Unit (Capital Area IU)
 - State (PA)
- Recommendations focused on fulfillment of our mission

*Source: www.education.pa.gov

Assessments and Performance Levels



PA System of School Assessment (PSSAs):

- English/Language Arts (ELA) – Grades 3 through 8
- Mathematics – Grades 3 through 8
- Science – Grades 4 and 8 only

Keystone Assessments:

- Literature – end of our English 10 course (typically grade 10)
- Algebra 1 – end of our algebra 1 course (typically grade 9)
- Biology – end of our biology course (typically grade 10)

Possible Performance Levels On All Assessments:

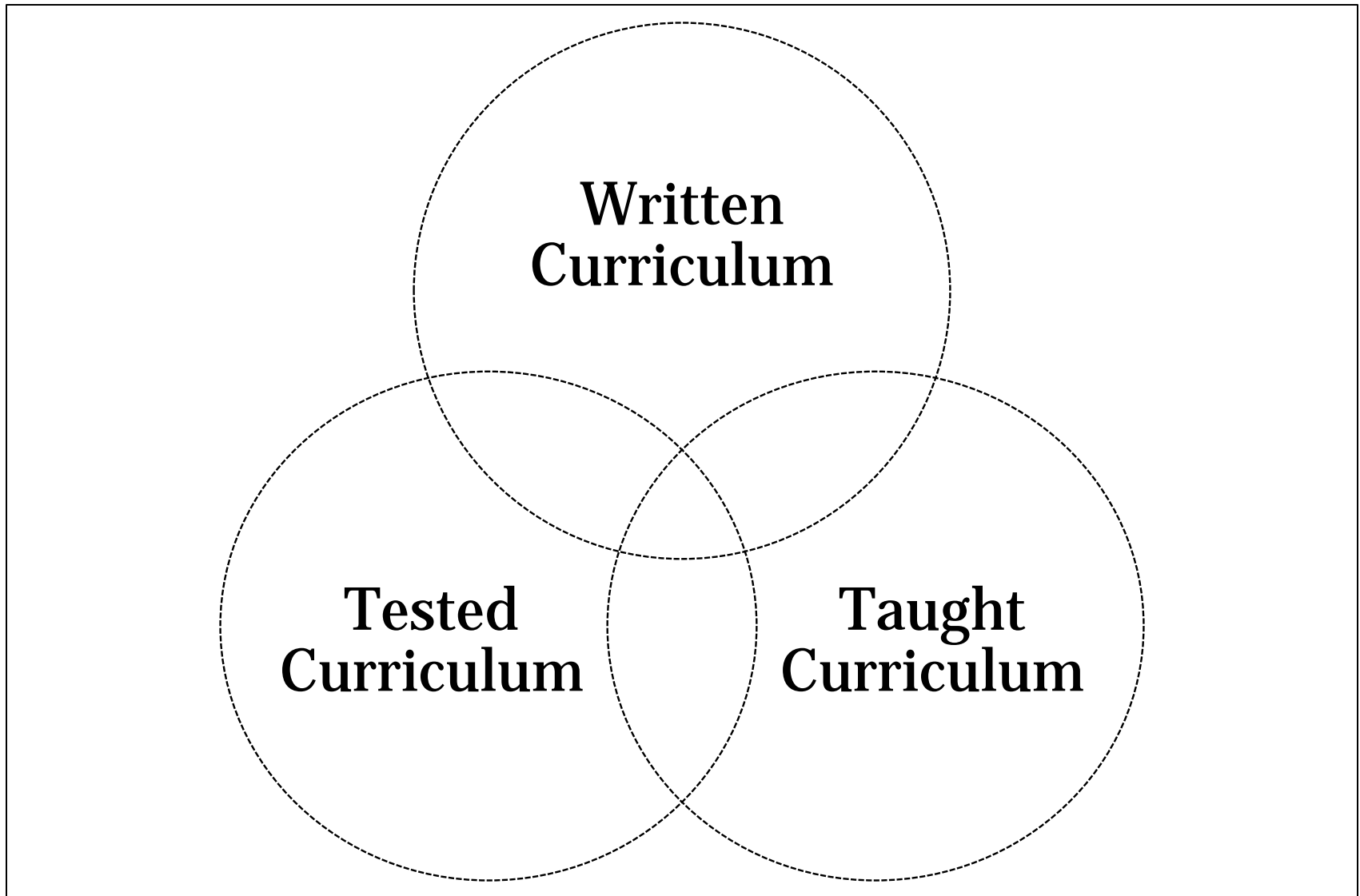
- Advanced (passed – significantly above expectation)
- Proficient (passed – met expectation)
- Basic (did not pass – below expectation)
- Below Basic (did not pass – significantly below expectation)

What Do We Mean By *CURRICULUM*?

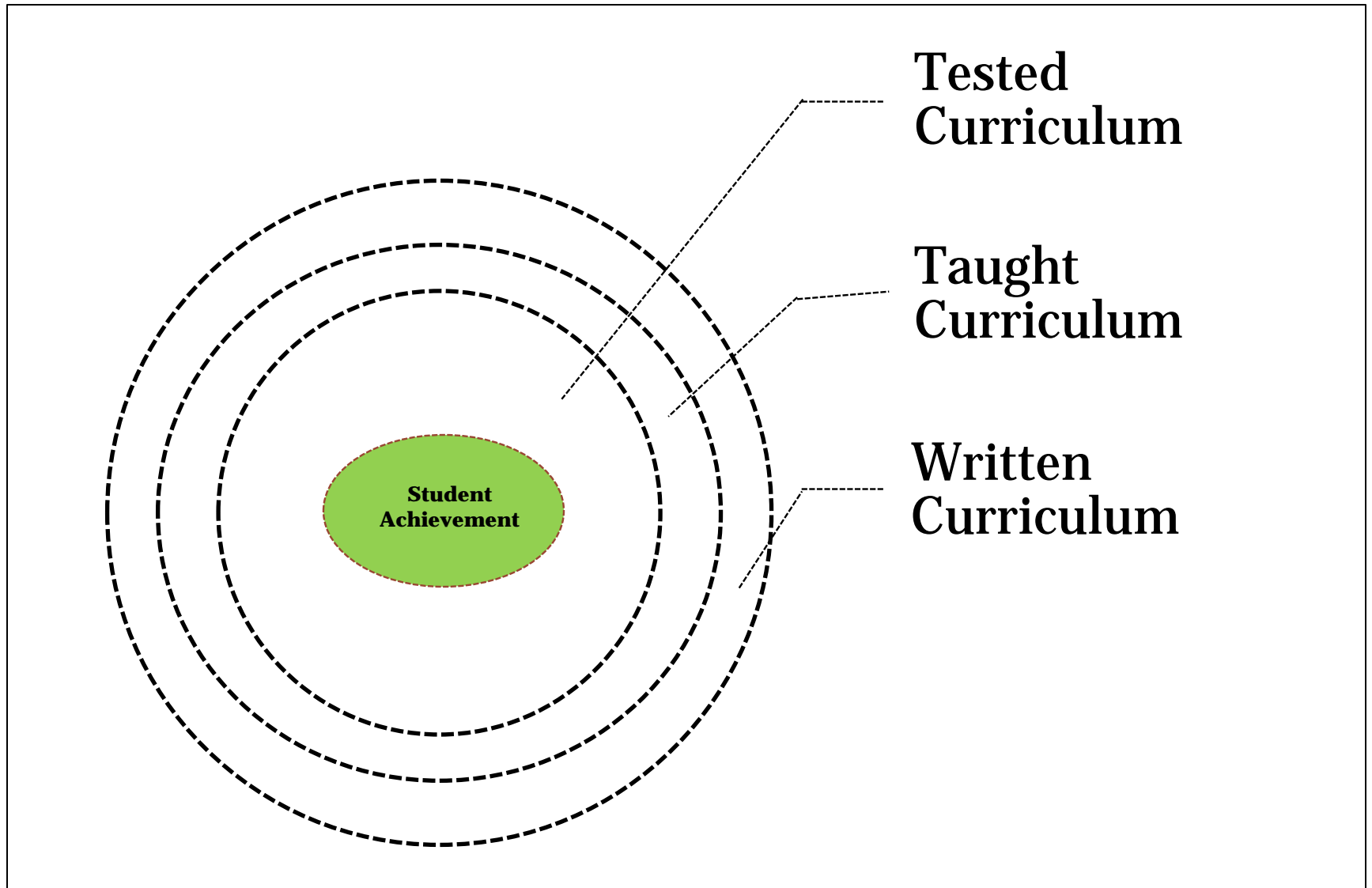


- Put simply, curriculum is the “WHAT” we teach – the content. It is NOT a textbook or materials.
A textbook is a resource we use to teach the curriculum.
- There are three types of curricula:
 - Written curriculum (the things we want to teach each year)
 - Taught curriculum (the things we actually do teach each year)
 - Tested curriculum (the things we test kids on each year)
- The three types of curricula and the supporting resources must be aligned to the current PA standards.

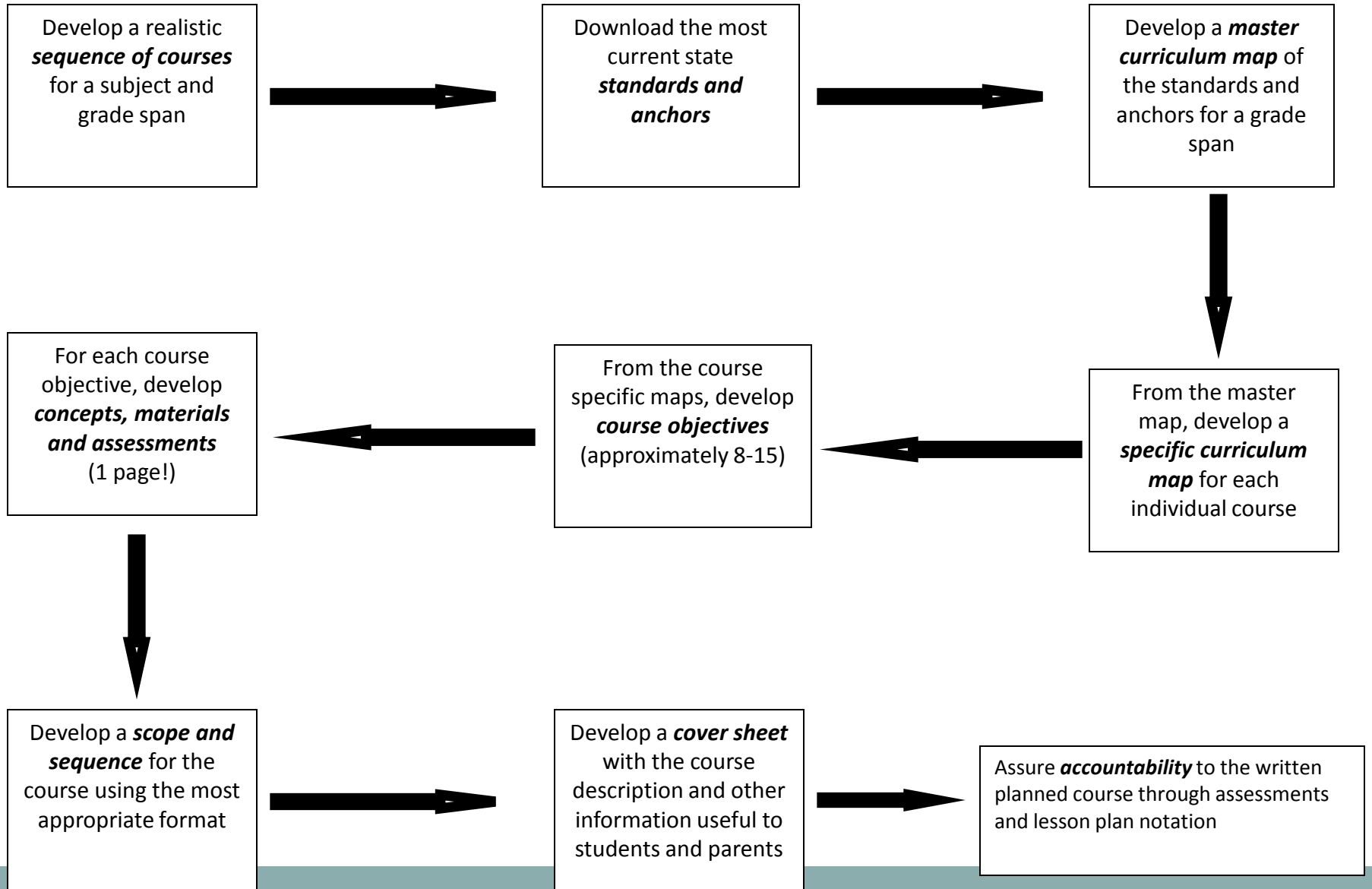
Curriculum - Unaligned



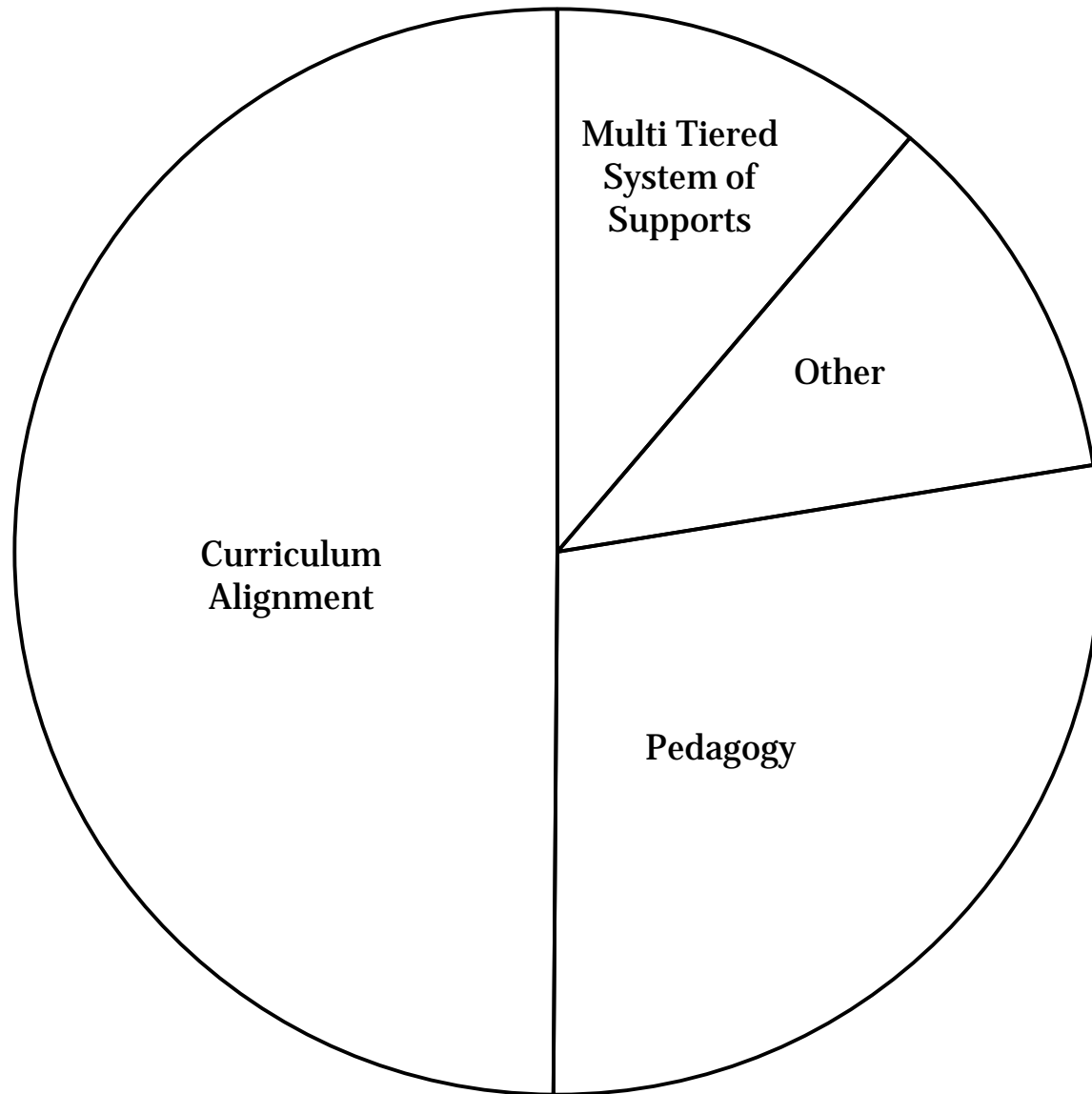
Curriculum - Aligned



Curriculum Development Flowchart



Factors That Influence Test Performance



2015-16 Millersburg Results

Math

Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	43%	1162/1625	64/78	21/33
4	51%	719/1587	42/77	14/33
5	30%	1005/1488	62/75	22/32
6	39%	509/1086	22/34	10/17
7	30%	451/908	24/34	9/17
8	19%	532/894	28/34	10/17

English / Language Arts

Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	58%	1011/1625	56/78	17/33
4	67%	582/1587	34/77	10/33
5	55%	940/1488	63/75	21/32
6	64%	467/1086	18/34	7/17
7	63%	375/908	17/34	6/17
8	56%	455/894	21/34	7/17

KEY

Top 10%
Top Quartile
Second Quartile
Third Quartile
Bottom Quartile
Scores not Available

Science

Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
4	85%	642/1587	35/77	12/33
8	71%	175/894	7/34	3/17

Keystones

Course	Adv. + Pro.	Rank State	Rank IU	Rank CO
Alg. 1	51%	546/739	25/27	11/13
Bio.	67%	362/737	17/27	5/13
Lit.	88%	147/737	6/27	2/13

School Performance Profile (SPP)

Bldg.	Overall	Rank State	Rank IU	Rank CO
ES	57	NA*	71/78	27/33
MS	63	NA*	22/34	9/17
HS	75	NA*	16/27	5/13

MASD Tuition Rate: \$ 12,966.20

State Average Tuition Rate: \$ 10,669.83

Tuition Rate Rank CO: 1/10 (average = \$ 11,459.86)

Tuition Rate Rank IU: 1/24 (average = \$ 11,013.81)

Tuition Rate Rank State: 60/500 (average = \$

* PDE only publishes SPP results by individual school - calculating state-wide rankings would be nearly impossible.

Actual Instructional Expense



- Actual Instructional Expense includes all general fund expenditures as reported on the Annual Financial Report (PDE-2057) with certain ***exceptions*** as identified by the Pennsylvania Department of Education
- Tuition Rates are calculated using a combination of Actual Instructional Expense and Average Daily Membership (ADM) based on building level (Elementary and Secondary)

Expenditure Exceptions



- **Equipment Purchases**
- **Early Intervention Services**
- **Vocational Education Tuition (less allowable cost as determined by PDE)**
- **Homebound Instruction**
- **Community College Tuition**
- **Pupil Health Services**
- **Student Transportation Services**
- **Site Acquisition/Architecture & Engineering Services**
- **Debt Service**
- **Federally Funded Expenditures**

Revenues Deducted from Expenditures to Determine Actual Instructional Expense (Revenue Exceptions)

- **Student Activities Revenue (gate receipts and participation fees)**
- **Tuition received from other School Districts**
- **Refunds of Prior Year Expenditures**
- **Special Education Subsidy**
- **Ready to Learn Block Grant Subsidy**
- **State Share of Social Security/Medicare & Retirement**
- **Federal Revenues – IDEA, Title I, Title II, and Medical Access Funds**

Lenkerville Elementary School SPP Results (2015-16)

DATA Element	Maximum Possible	Actual Performance		Factor Value	=	Earned Points	Possible Points
Academic Achievement:							
Mathematics - Percent Proficient or Advanced on PSSA	100.00	42.08	x	7.50%	=	3.16	7.50
ELA - Percent Proficient or Advanced on PSSA	100.00	60.66	x	15.00%	=	9.10	15.00
Science - Percent Proficient or Advanced on PSSA	100.00	85.96	x	7.50%	=	6.45	7.50
Grade 3 ELA - Percent Proficient or Advanced on PSSA	100.00	59.09	x	10.00%	=	5.91	10.00
TOTALS:						24.62	40.00

Closing the Achievement Gap (All Students):							
Mathematics - Percent of Required Gap Closure Met	100.00	0.00	x	1.25%	=	0.00	1.25
ELA - Percent of Required Gap Closure Met	100.00	0.00	x	2.50%	=	0.00	2.50
Science - Percent of Required Gap Closure Met	100.00	0.00	x	1.25%	=	0.00	1.25
TOTALS:						0.00	5.00

Closing the Achievement Gap (Historically Underperforming Students):							
Mathematics - Percent of Required Gap Closure Met	100.00	0.00	x	1.25%	=	0.00	1.25
ELA - Percent of Required Gap Closure Met	100.00	0.00	x	2.50%	=	0.00	2.50
Science - Percent of Required Gap Closure Met	100.00	0.00	x	1.25%	=	0.00	1.25
TOTALS:						0.00	5.00

Academic Growth/PVAAS:							
Mathematics - Meeting Annual Academic Growth Expectations	100.00	50.00	x	10.00%	=	5.00	10.00
ELA - Meeting Annual Academic Growth Expectations	100.00	50.00	x	20.00%	=	10.00	20.00
Science - Meeting Annual Academic Growth Expectations	100.00	71.00	x	10.00%	=	7.10	10.00
TOTALS:						22.10	40.00

Other Academic Indicators:							
Promotion Rate	100.00	98.90	x	5.00%	=	4.94	5.00
Attendance Rate	100.00	95.86	x	5.00%	=	4.79	5.00
TOTALS:						9.73	10.00

SUB TOTALS: **56.45** **100.00**

Extra Credit for Advanced Achievement:							
Percent Advanced on PSSA Mathematics		10.38	x	1.00%	=	0.10	
Percent Advanced on PSSA ELA		7.10	x	2.00%	=	0.14	
Percent Advanced on PSSA Science		45.61	x	1.00%	=	0.46	
TOTALS:						0.70	

GRAND TOTAL SCORE

57.15

Millersburg Middle School SPP Results (2015-16)

DATA Element	Maximum Possible	Actual Performance		Factor Value		Earned Points	Possible Points
Academic Achievement:							
Mathematics - Percent Proficient or Advanced on PSSA and Algebra 1 Keystone	100.00	28.81	x	10.00%	=	2.88	10.00
ELA - Percent Proficient or Advanced on PSSA	100.00	60.23	x	20.00%	=	12.05	20.00
Science - Percent Proficient or Advanced on PSSA	100.00	72.22	x	10.00%	=	7.22	10.00
TOTALS:						22.15	40.00

Closing the Achievement Gap (All Students):

Mathematics - Percent of Required Gap Closure Met	100.00	100.00	x	1.25%	=	1.25	1.25
ELA - Percent of Required Gap Closure Met	100.00	0.00	x	2.50%	=	0.00	2.50
Science - Percent of Required Gap Closure Met	100.00	0.00	x	1.25%	=	0.00	1.25
TOTALS:						1.25	5.00

Closing the Achievement Gap (Historically Underperforming Students):

Mathematics - Percent of Required Gap Closure Met	100.00	86.75	x	1.25%	=	1.08	1.25
ELA - Percent of Required Gap Closure Met	100.00	0.00	x	2.50%	=	0.00	2.50
Science - Percent of Required Gap Closure Met	100.00	0.00	x	1.25%	=	0.00	1.25
TOTALS:						1.08	5.00

Academic Growth/PVAAS:

Mathematics - Meeting Annual Academic Growth Expectations	100.00	71.00	x	10.00%	=	7.10	10.00
ELA - Meeting Annual Academic Growth Expectations	100.00	67.00	x	20.00%	=	13.40	20.00
Science - Meeting Annual Academic Growth Expectations	100.00	77.00	x	10.00%	=	7.70	10.00
TOTALS:						28.20	40.00

Other Academic Indicators:

Promotion Rate	100.00	100.00	x	5.00%	=	5.00	5.00
Attendance Rate	100.00	94.54	x	5.00%	=	4.73	5.00
TOTALS:						9.73	10.00

SUB TOTALS:

62.41	100.00
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Extra Credit for Advanced Achievement:

Percent Advanced on PSSA Mathematics	6.78	x	1.00%	=	0.07
Percent Advanced on PSSA ELA	12.50	x	2.00%	=	0.25
Percent Advanced on PSSA Science	25.93	x	1.00%	=	0.26
TOTALS:					0.58

GRAND TOTAL SCORE

62.99

Millersburg High School SPP Results (2015-16)

DATA Element	Maximum Possible	Actual Performance	Factor Value	Earned Points	Possible Points
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Academic Achievement:

Mathematics - Percent Proficient or Advanced on the Algebra 1 Keystone	100.00	50.98	x	7.50%	=	3.82	7.50
ELA - Percent Proficient or Advanced on the Literature Keystone	100.00	88.24	x	15.00%	=	13.24	15.00
Science - Percent Proficient or Advanced on the Biology Keystone	100.00	68.63	x	7.50%	=	5.15	7.50
SAT/ACT Results	100.00	31.25	x	5.00%	=	1.56	5
TOTALS:						23.77	35.00

Closing the Achievement Gap (All Students):

Mathematics - Percent of Required Gap Closure Met	100.00	0.00	x	1.25%	=	0.00	1.25
ELA - Percent of Required Gap Closure Met	100.00	100.00	x	2.50%	=	2.50	2.50
Science - Percent of Required Gap Closure Met	100.00	100.00	x	1.25%	=	1.25	1.25
TOTALS:						3.75	5.00

Closing the Achievement Gap (Historically Underperforming Students):

Mathematics - Percent of Required Gap Closure Met	100.00	88.46	x	1.25%	=	1.11	1.25
ELA - Percent of Required Gap Closure Met	100.00	100.00	x	2.50%	=	2.50	2.50
Science - Percent of Required Gap Closure Met	100.00	100.00	x	1.25%	=	1.25	1.25
TOTALS:						4.86	5.00

Academic Growth/PVAAS:

Mathematics - Meeting Annual Academic Growth Expectations	100.00	50.00	x	10.00%	=	5.00	10.00
ELA - Meeting Annual Academic Growth Expectations	100.00	100.00	x	20.00%	=	20.00	20.00
Science - Meeting Annual Academic Growth Expectations	100.00	58.00	x	10.00%	=	5.80	10.00
TOTALS:						30.80	40.00

Other Academic Indicators:

Graduation Rate	100.00	94.03	x	2.50%	=	2.35	2.50
Attendance Rate	100.00	93.72	x	2.50%	=	2.34	2.50
Advanced Placement Test Performance	100.00	25.00	x	2.50%	=	0.63	2.50
PSAT Participation Rate	100.00	80.75	x	2.50%	=	2.02	2.50
TOTALS:						7.34	10.00

SUB TOTALS:

CALCULATED POINTS (POINTS EARNED DIVIDED BY 95 POSSIBLE):

70.51	95.00
74.22	

Extra Credit for Advanced Achievement:

Percent Advanced on Keystone Algebra 1	5.88	x	1.00%	=	0.06
Percent Advanced on Keystone Literature	13.73	x	2.00%	=	0.27
Percent Advanced on Keystone Biology	17.65	x	1.00%	=	0.18
TOTALS:					0.51

GRAND TOTAL SCORE

74.73

(2013-14)

(2014-15)

(2015-16)

Math

Math				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	91%	N/A*	12/78	3/33
4	84%	N/A*	36/77	11/33
5	78%	N/A*	34/75	13/32
6	76%	N/A*	18/34	9/17
7	80%	N/A*	20/34	6/17
8	84%	N/A*	13/34	6/17

Math				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	70%	287/1546	10/78	5/33
4	61%	400/1605	22/77	9/33
5	45%	697/1498	43/75	16/32
6	30%	645/1089	22/34	8/17
7	25%	474/892	23/34	9/17
8	16%	557/880	29/34	12/17

Math				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	43%	1162/1625	64/78	21/33
4	51%	719/1587	42/77	14/33
5	30%	1005/1488	62/75	22/32
6	39%	509/1086	22/34	10/17
7	30%	451/908	24/34	9/17
8	19%	532/894	28/34	10/17

ELA

English / Language Arts				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	72%	N/A*	51/78	16/33
4	83%	N/A*	21/77	7/33
5	74%	N/A*	27/75	11/32
6	66%	N/A*	22/34	8/17
7	80%	N/A*	14/34	4/17
8	82%	N/A*	21/34	7/17

English / Language Arts				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	79%	321/1646	16/78	8/33
4	72%	474/1604	23/77	8/33
5	68%	630/1497	44/75	15/32
6	67%	402/1088	17/34	7/17
7	65%	286/892	10/34	5/17
8	61%	357/881	18/34	7/17

English / Language Arts				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
3	58%	1011/1625	56/78	17/33
4	67%	582/1587	34/77	10/33
5	55%	940/1488	63/75	21/32
6	64%	467/1086	18/34	7/17
7	63%	375/908	17/34	6/17
8	56%	455/894	21/34	7/17

Science

Science				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
4	99%	N/A*	3/77	1/33
8	71%	N/A*	11/34	5/17

Science				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
4	91%	401/1602	11/77	4/33
8	72%	188/881	8/34	3/17

Science				
Grade	Adv. + Pro.	Rank State	Rank IU	Rank CO
4	85%	642/1587	35/77	12/33
8	71%	175/894	7/34	3/17

Keystones

Keystones				
Course	Adv. + Pro.	Rank State	Rank IU	Rank CO
Alg. 1	60%	420/684	19/27	8/13
Bio.	62%	248/685	7/27	4/13
Lit.	72%	417/684	17/27	7/13

Keystones				
Course	Adv. + Pro.	Rank State	Rank IU	Rank CO
Alg. 1	74%	233/686	7/27	4/13
Bio.	75%	129/687	4/27	2/13
Lit.	87%	112/687	7/27	4/13

Keystones				
Course	Adv. + Pro.	Rank State	Rank IU	Rank CO
Alg. 1	51%	546/739	25/27	11/13
Bio.	67%	362/737	17/27	5/13
Lit.	88%	147/737	6/27	2/13

SPP

School Performance Profile (SPP)				
Bldg.	Overall	Rank State	Rank IU	Rank CO
ES	78	N/A**	41/75	11/30
MS	74	N/A**	23/31	10/15
HS	74	N/A**	15/27	5/13

School Performance Profile (SPP)				
Bldg.	Overall	Rank State	Rank IU	Rank CO
ES	N/A**	N/A**	N/A**	N/A**
MS	N/A**	N/A**	N/A**	N/A**
HS	N/A**	N/A**	N/A**	N/A**

School Performance Profile (SPP)				
Bldg.	Overall	Rank State	Rank IU	Rank CO
ES	57	N/A**	71/78	27/33
MS	63	N/A**	22/34	9/17
HS	75	N/A**	16/27	5/13

Tuition

MASD Tuition Rate: \$ 10,958.52	
State Average Tuition Rate: \$ 9,829.75	
Tuition Rate Rank CO:	1/10 (average = \$ 9,798.93)
Tuition Rate Rank IU:	1/24 (average = \$ 9,351.87)
Tuition Rate Rank State:	116/500

MASD Tuition Rate: \$ 11,799.17	
State Average Tuition Rate: \$ 10,229.42	
Tuition Rate Rank CO:	1/10 (average = \$ 10,216.06)
Tuition Rate Rank IU:	1/24 (average = \$ 9,795.72)
Tuition Rate Rank State:	88/500

MASD Tuition Rate: \$ 12,966.20	
State Average Tuition Rate: \$ 10,669.83	
Tuition Rate Rank CO:	1/10 (average = \$ 11,459.86)
Tuition Rate Rank IU:	1/24 (average = \$ 11,013.81)
Tuition Rate Rank State:	60/500

Notes

* PDE did not publish state-wide PSSA results because of the realignment of the tests this year.
 ** PDE only publishes SPP results by individual school, calculating state-wide rankings is nearly impossible.

* PDE did not calculate SPP results in 2014-15 because the PSSA tests went through total revision.

* PDE only publishes SPP results by individual school, calculating state-wide rankings is nearly impossible.

Key:

Top 10%

Top Quartile

Second Quartile

Third Quartile

Bottom Quartile

3-Year Trend: Summary Points



- PSSA performance in math and English/language arts is declining in most grade levels.
- PSSA performance in science has held fairly steady in grade 8 but is declining in grade 4.
- Keystone performance in Algebra 1 is inconsistent but generally below comparison
 - groups.
- Keystone performance in Biology is inconsistent but in the upper half of comparison
 - groups.
- Keystone performance in Literature is progressing steadily in the top quartile of
 - comparison groups.
- SPP performance is generally below comparison groups mainly due to a lack of growth.

Recommended Path Forward



1. It is likely that the root cause of the generally poor PSSA and SPP performance is a lack of alignment among the written, taught, and tested curricula. The district should undertake an overall curriculum mapping and development process beginning with the core subjects.

- **Timeline:** Begin the mapping process immediately. Complete the entire curriculum development process by the end of the 2019-20 school year.

Recommended Path Forward



2. Mathematics appears to be of greatest immediate concern among the core subjects. Implement a new - PA Core standards aligned – math program in grades K-8.

•**Timeline:** Research, select, purchase, and begin training on a new math program during the 2017-18 school year. Formally implement the program at the beginning of the 2018-19 school year.

Recommended Path Forward



3. Increase the academic rigor in all core subject areas, especially mathematics, by redesigning course sequences. Goal: At least 50% of grade 8 students complete Algebra 1.

•**Timeline:** Research the feasibility of redesigned sequences (staff, schedule, budget) during the summer and fall of 2017. Finalize sequences during the 2017-18 school year. Implement new sequences beginning with the 2018-19 school year. Increase the number of grade 8 students taking Algebra 1 to at least 50% beginning in the 2019-20 school year.