

Fairfield Public Schools
2016-2017 Data Analysis:
Determining Areas of Growth
and Continuing Need

Board of Education
November 28, 2017

Presentation Objectives

- Review Related District Improvement Plan Goals and Action Steps
- Communicate Guiding Principles of Instructional Improvement
- Describe the Instructional Improvement Process
- Highlight Areas of Growth as They Relate to Past and Current Actions
- Highlight Areas of Continuing Need as They Relate to Past and Future Actions

Focus Questions

- What is the work of the Fairfield Public Schools instructional staff to continually improve student achievement?
- What have we learned from areas of growth? What have we learned from areas of continued need?
- Where do we need to work next and what is needed to support growth in those areas?

Please hold your questions to the end.

District Improvement Plan: Priorities

- Each staff member will support well-rounded academic success including expressive, personal, physical, civic, and social development for all students. Each staff member will support all students in developing an appreciation and understanding of global issues
- Student achievement and performance shall rank among the best in the state and the nation
- Leadership will support, design, and implement a comprehensive educational program for PK-21+
- Improve resources through human staffing, time, and materials

Guiding Principles of Instructional Improvement

- ALL students must learn to mastery content and skill levels
- All efforts must improve the lesson-specific interactions of student-teacher-content/skills
- Identify a finite but powerful PK-12 set of learning expectations in content and skills
- Collaboratively build curriculum and implementation guides that achieve the learning expectations in content and skills
- Identify the needs in professional learning for all staff to support best practices in every school, every classroom
- Monitor and adjust implementation and supports in response to identified areas of growth and continuing need

Challenges to the Principles of Instructional Improvement

- Variability
 - Size of the District
 - Staffing Changes
 - Needs of Students and Staff
- Budget Priorities
- State and National Expectations

The Improvement Process

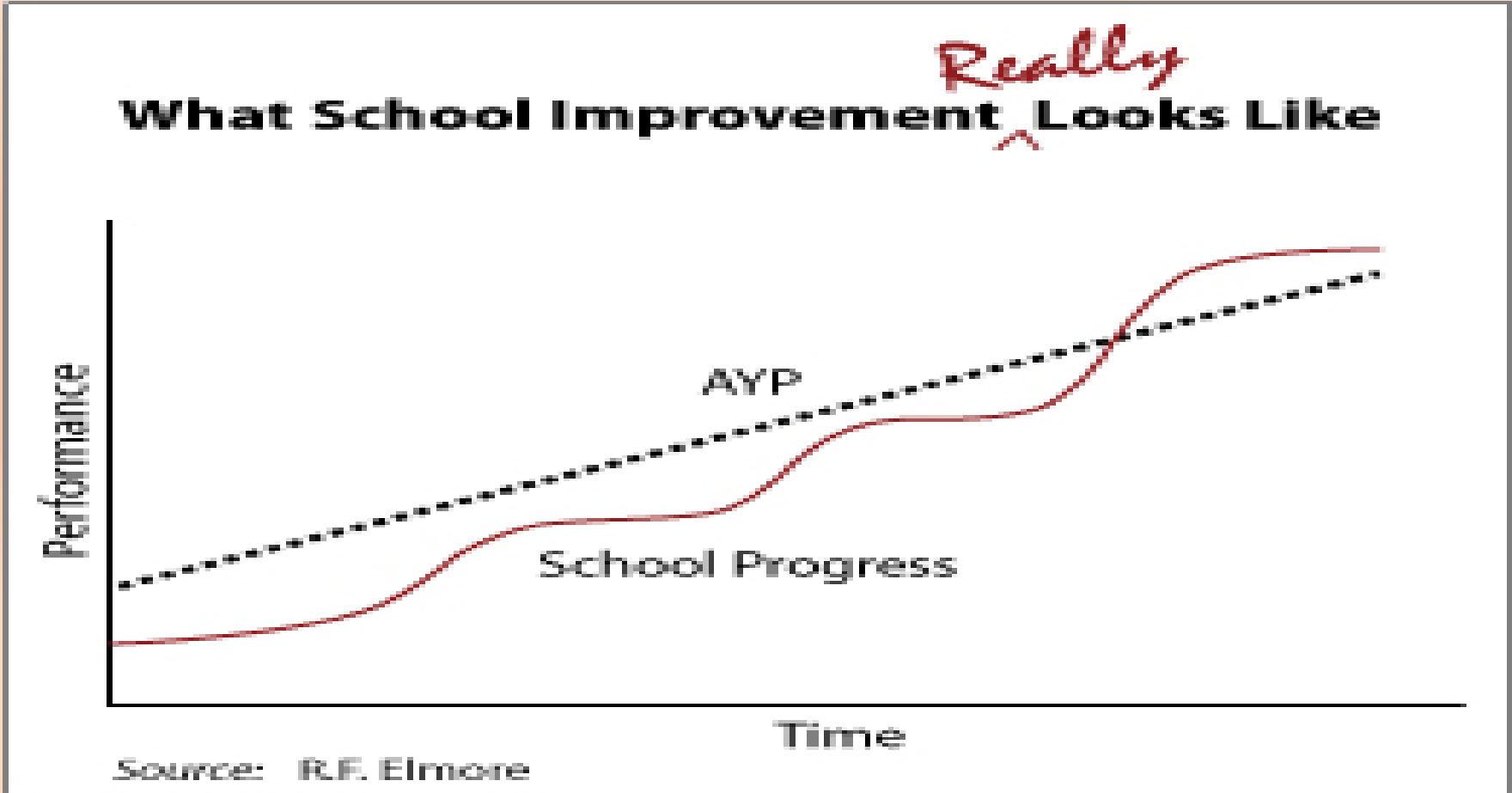


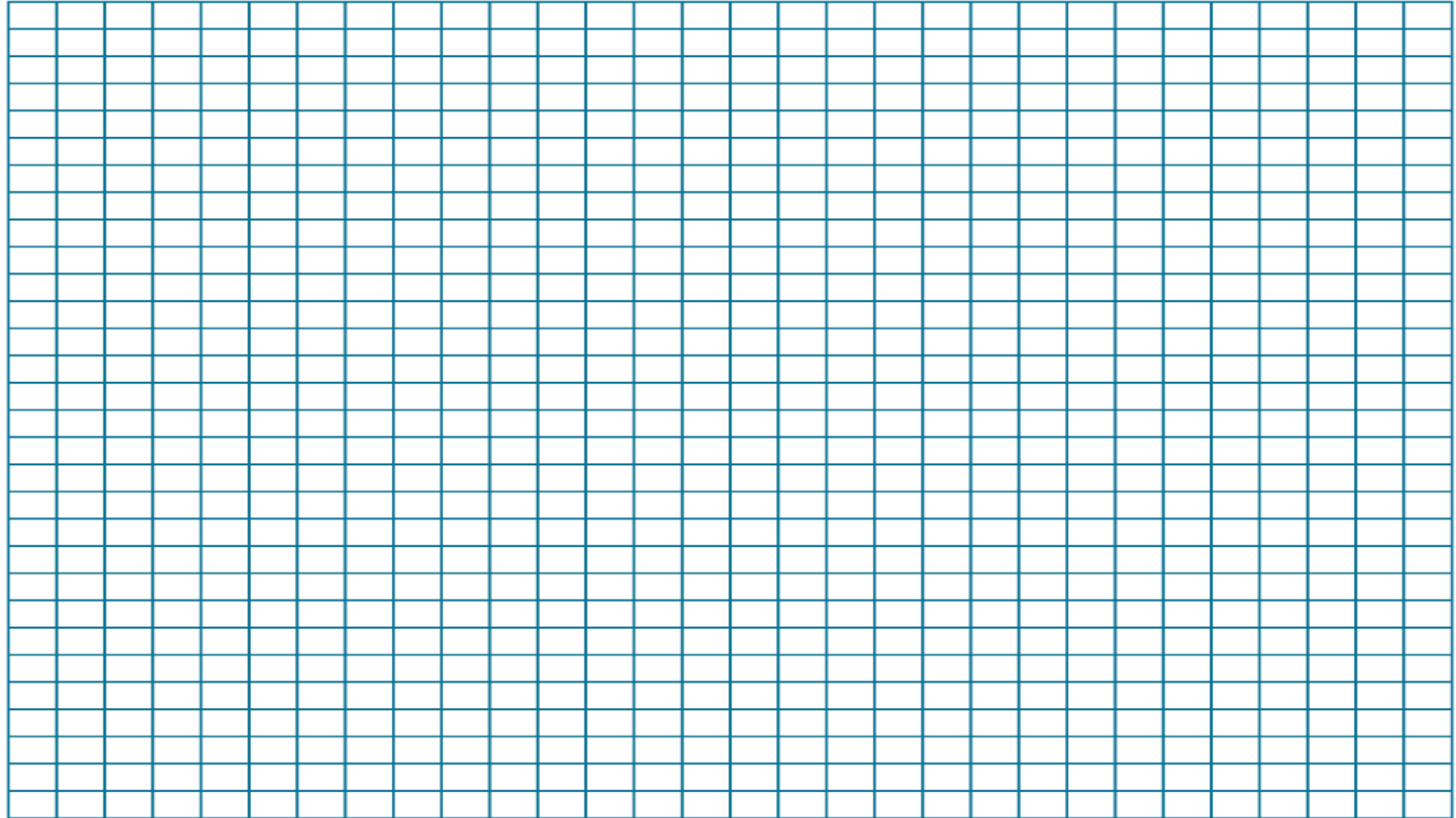
FIGURE 1.

How many teachers does a student see through the years?

K	Ms. King - Reading, Writing, Math, Science, and Social Studies + Homeroom							Art	Music	Phys Ed	Library	Tech
1	Ms. Reid - Reading, Writing, Math, Science, and Social Studies + Homeroom							Art	Music	Phys Ed	Library	Tech
2	Mr. Wilding - Reading, Writing, Math, Science, and Social Studies + Homeroom							Art	Music	Phys Ed	Library	Tech
3	Miss Roche - Reading, Writing, Math, Science, and Social Studies + Homeroom							Art	Music	Phys Ed	Library	Tech
4	Ms. Simms - Reading, Writing, Math, Science, and Social Studies + Homeroom							Art	Music	Phys Ed	Library	Tech
5	Mr. Hastings - Reading, Writing, Math, Science, and Social Studies + Homeroom							Art	Music	Phys Ed	Library	Tech
6	Math + HR	Social studies	Science	English	World lang.	Phys Ed	Music	Art	Drama	Tech		
7	English + HR	World lang.	Math	Social studies	Science	Drama	Tech	Phys Ed	Music	Art		
8	Social studies + HR	Science	English	World lang.	Math	Music	Tech	Art	Phys Ed	Drama		
9	Biology + advisory	Algebra	World Hist.	Spanish	English	Elective	Phys Ed	Health				
10	Geometry + advisory	World Hist.	English	Elective	Spanish	Phys Ed	Health	Earth science				
11	English + advisory	Chemistry	Algebra II	Spanish	U.S. History	Phys Ed	Health	Elective				
12	Civics + advisory	Latin	English	Phys Ed	Health	Elective	Pre-calculus	Physics				

FIGURE 2.

**Each year, each teacher teaches about 900 lessons.
Each square represents one lesson.**



“The key to improved student learning is to ensure more good teaching in more classrooms more of the time.”

Richard DuFour and Mike Mattos (2013)

Overall Headlines

- Prior district and school initiatives demonstrate increased student achievement
- Work still must be done
- The use of data helps identify and guide our work; it is not the end in itself
- How do the examples presented this evening demonstrate the principles of instructional improvement?

Data Analysis: What Do We Look For?

- Grade-to-Grade (Cross-Sectional Analysis)
- Cohort growth (Longitudinal Analysis)
- Disaggregation by populations
- District comparative performances

Secondary Mathematics

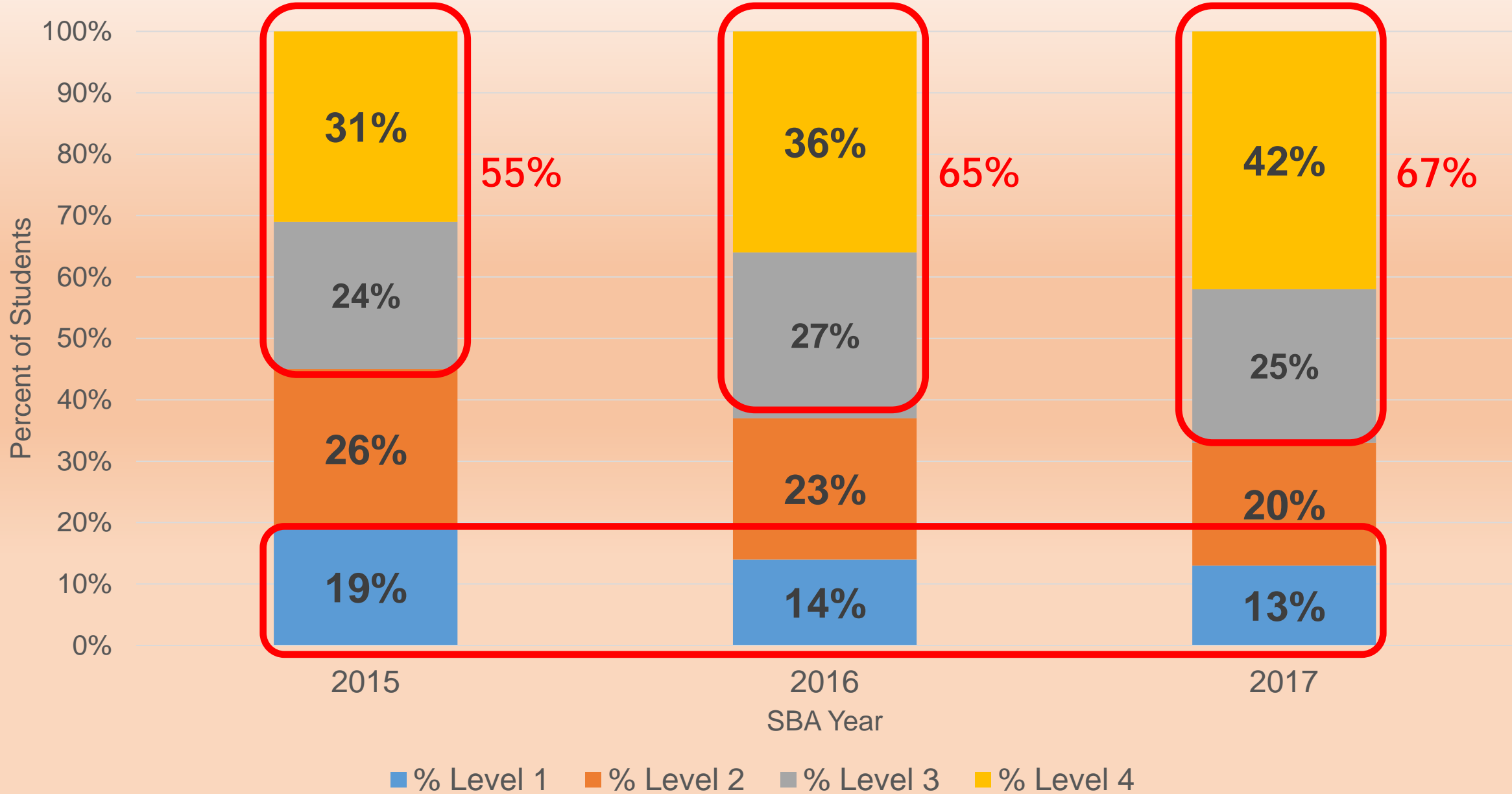
Dr. Paul Rasmussen

Director of Secondary Mathematics and Student Achievement

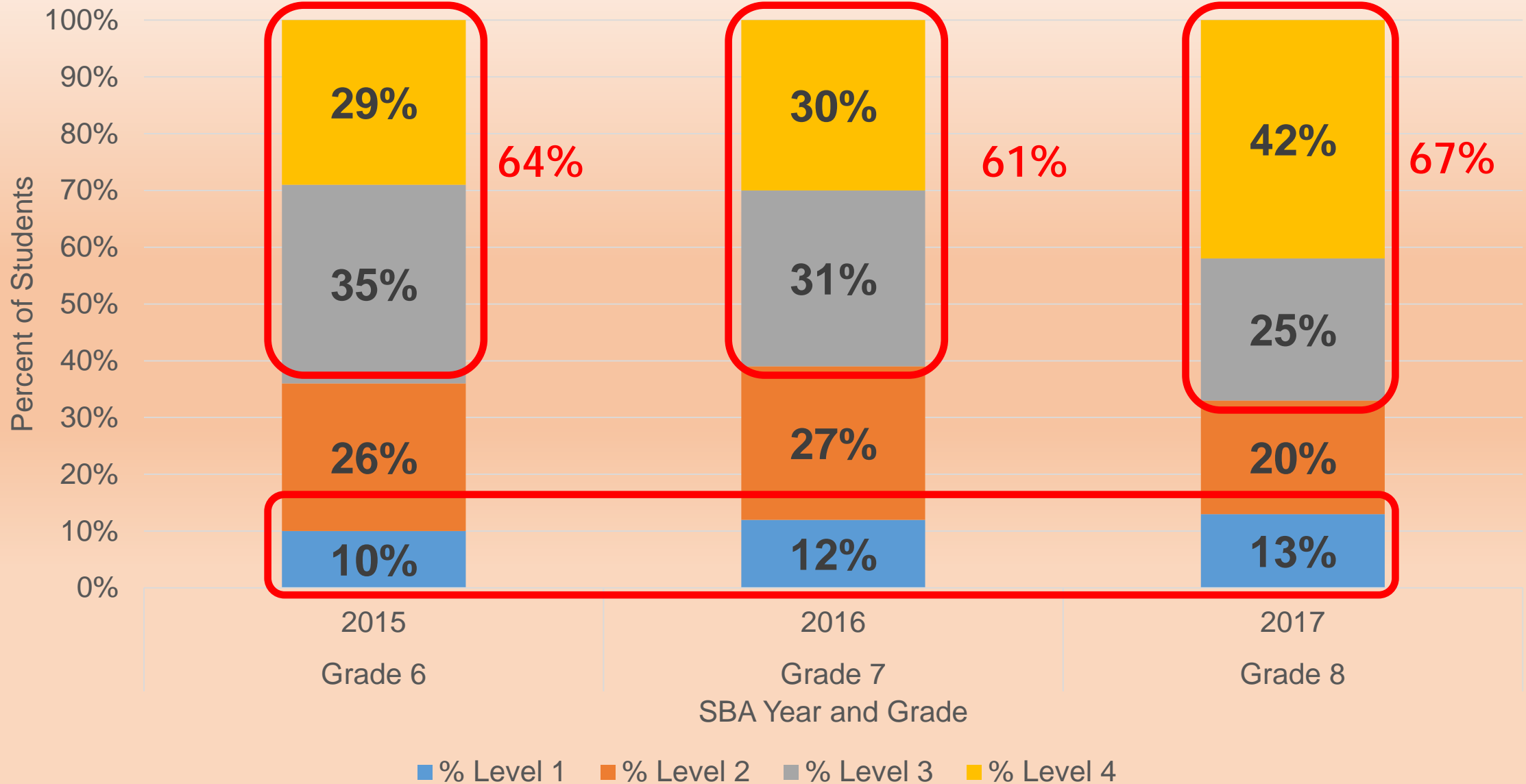
Secondary Mathematics

- Provided PD on how to use assessment data (e.g., SBA Online Reporting System) and identified areas of need
- Worked with teacher teams to provide interventions to students based on the results identified in the data
- Used research-based instructional approaches to provide interventions with students
- Provided feedback to teachers on implementation of approaches

Grade 8 SBA Math: 2015-2017



SBA Cohort: 2015 to 2017



Moving Forward: Secondary Mathematics

- Build teacher capacity to support struggling learners
- Continue to implement researched-based instructional strategies to teachers and support school-based administrators in monitoring effectiveness

Elementary Mathematics

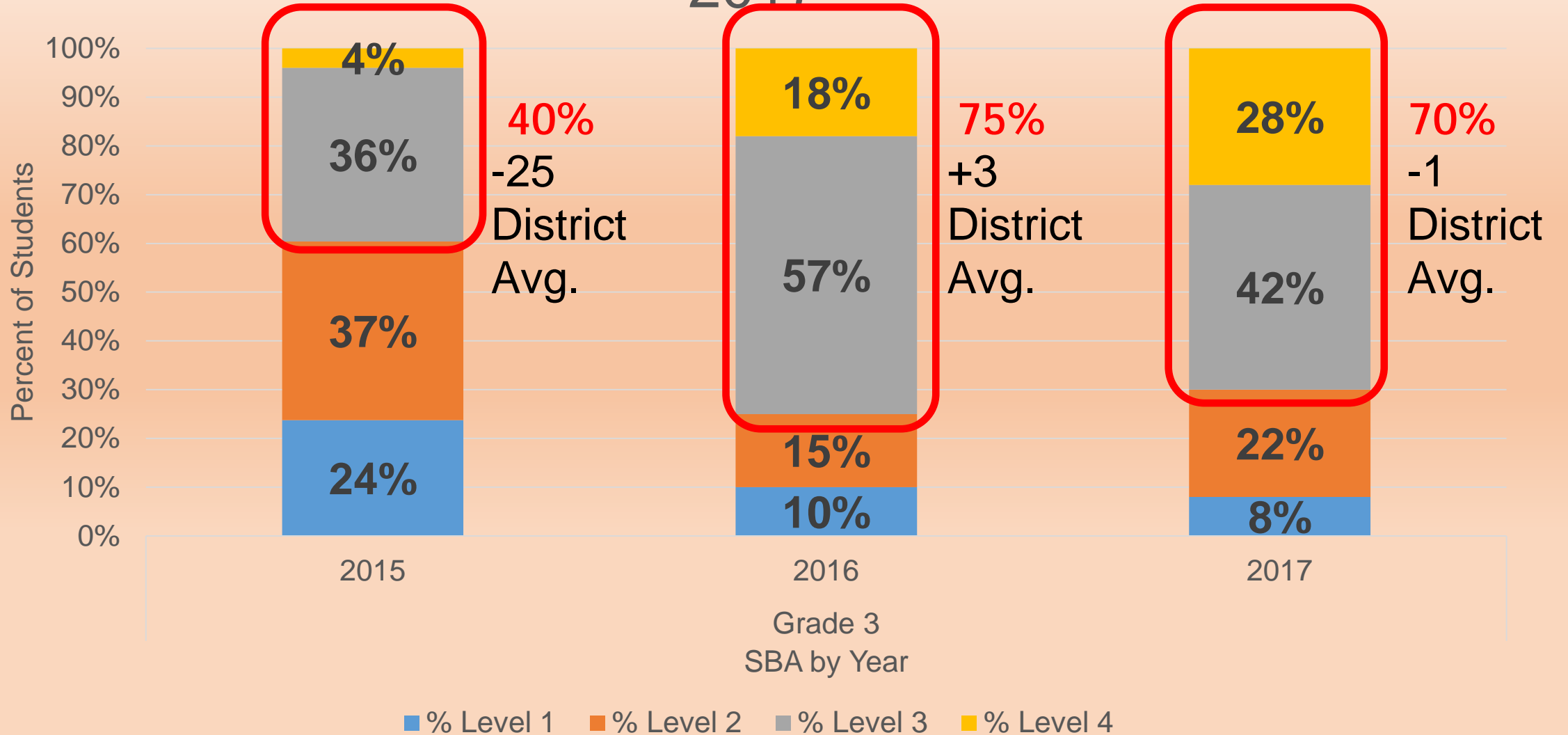
Walter Wakeman

Director of Elementary Mathematics, Science, & Enrichment

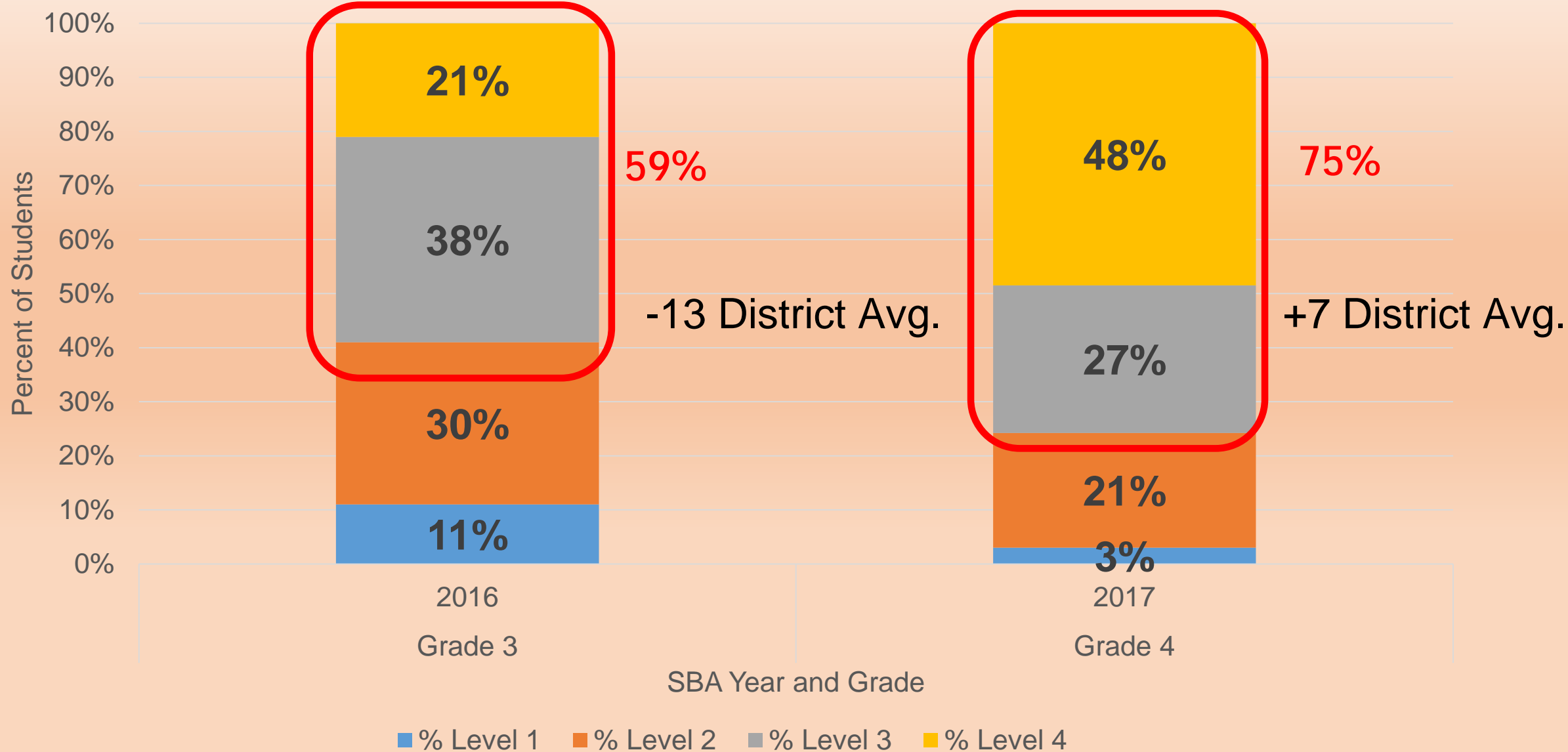
Elementary Mathematics

- Analyzed formative and summative assessment data
- Provided consistent embedded Professional Development with teachers
- Ensured commitment and follow-through – Program Director, Principal, classroom teachers, and Math Science Teacher (MST)
- Reviewed student work to differentiate and plan targeted core instruction
- Reflected on and shared effective instructional strategies

Elementary School Grade 3 SBA Math: 2015-2017



Elementary School Cohort: 2016 to 2017



Moving Forward: Elementary Mathematics

- Build Math Science Teacher (MST) and classroom teacher capacity to support all learners
- Continue to implement researched-based instructional strategies to teachers and support school-based administrators in monitoring effectiveness

Science

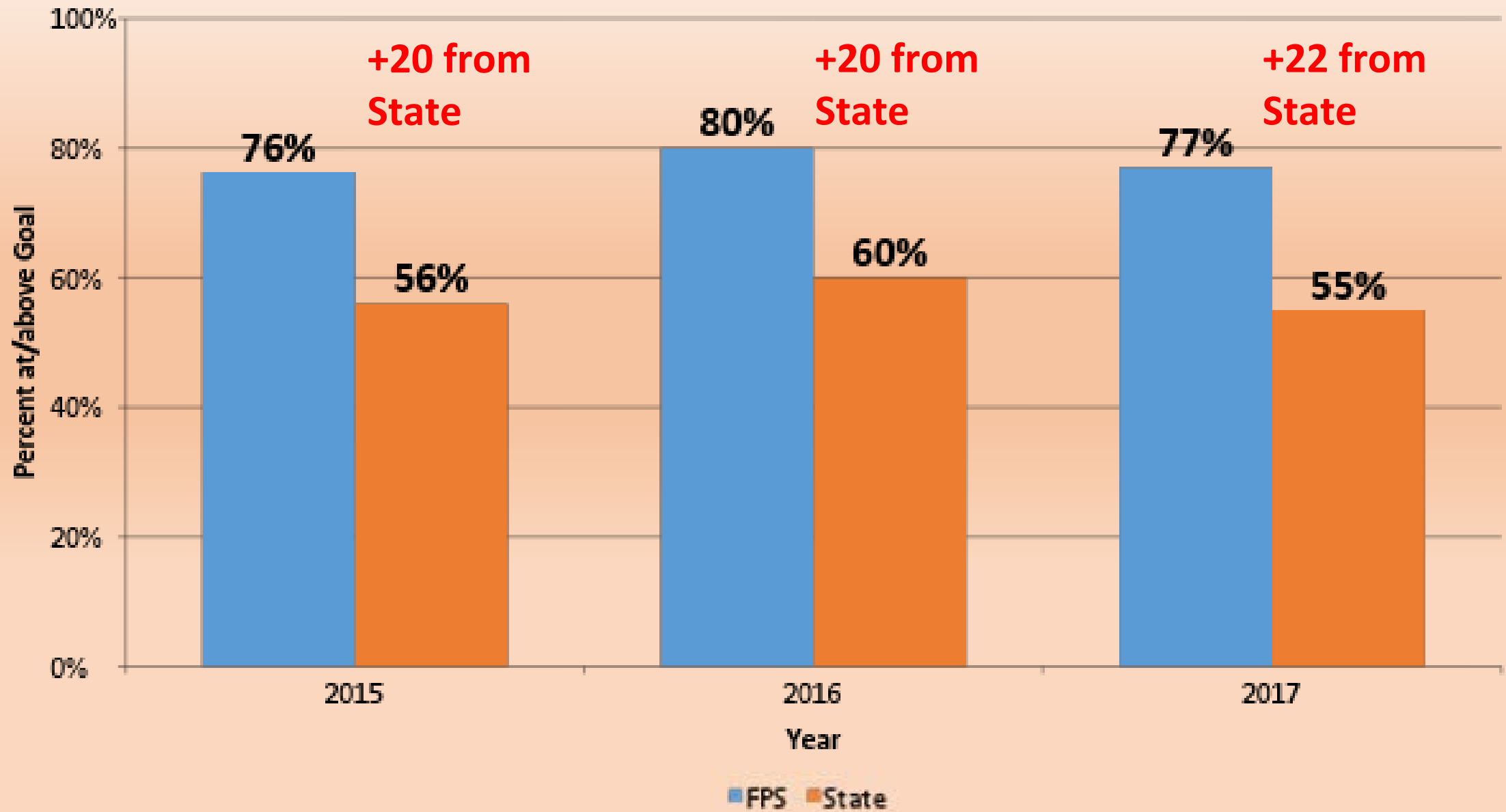
Patrice Faggella

Director of K-12 STEAM & 6-12 Science

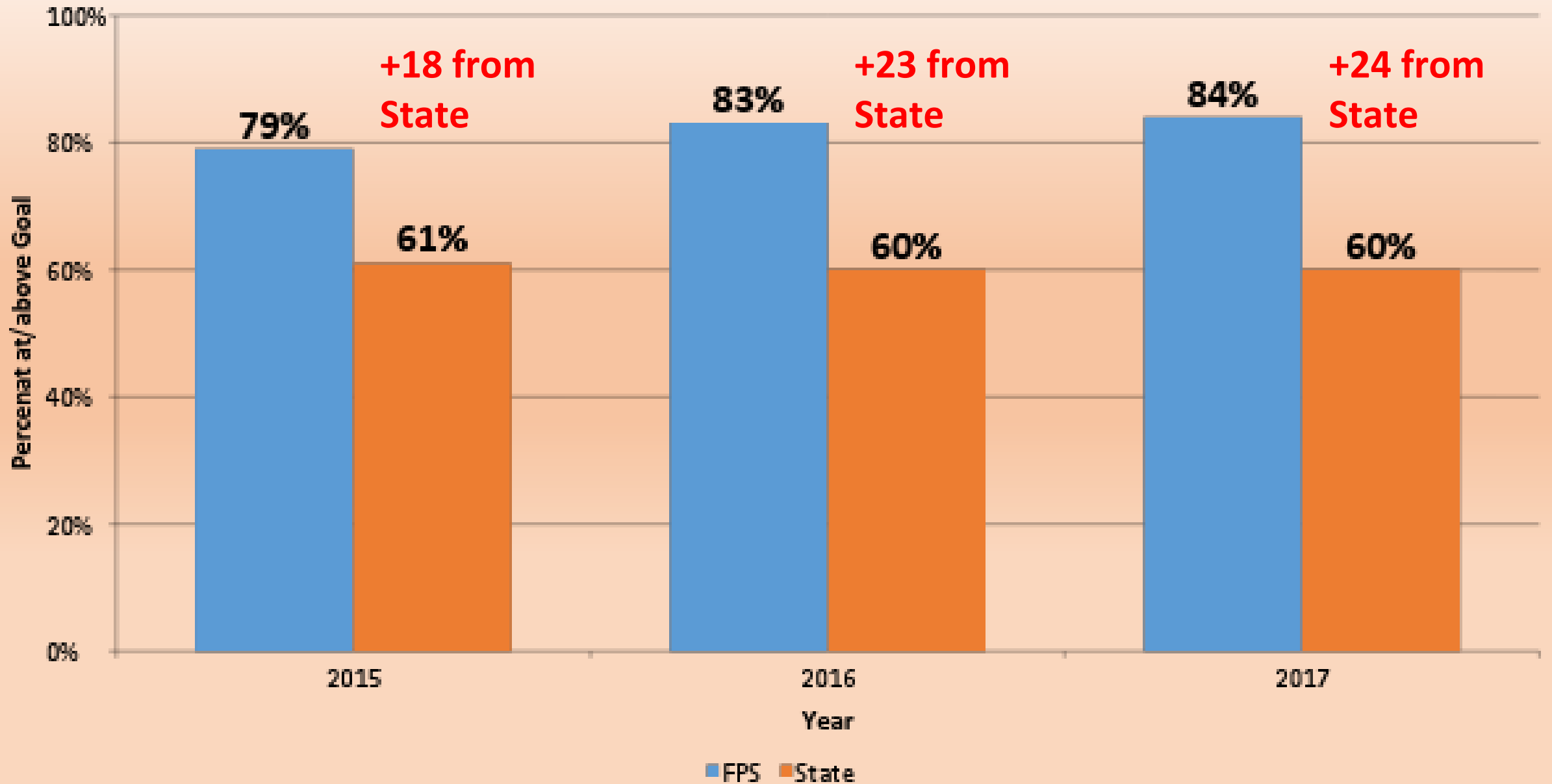
Secondary Science

- Identified that student performance declined from grade 8 to grade 10 on the content knowledge portion of the state assessment. Focused on the Cell Chemistry and Biotechnology strand in grade 9 and 10 (in Biology courses)
- Provided Professional Development on specific instructional and assessment strategies related to both standard specific content along with general problem solving
- Worked with teacher teams to examine local assessment data and provide interventions to specific students based on the results

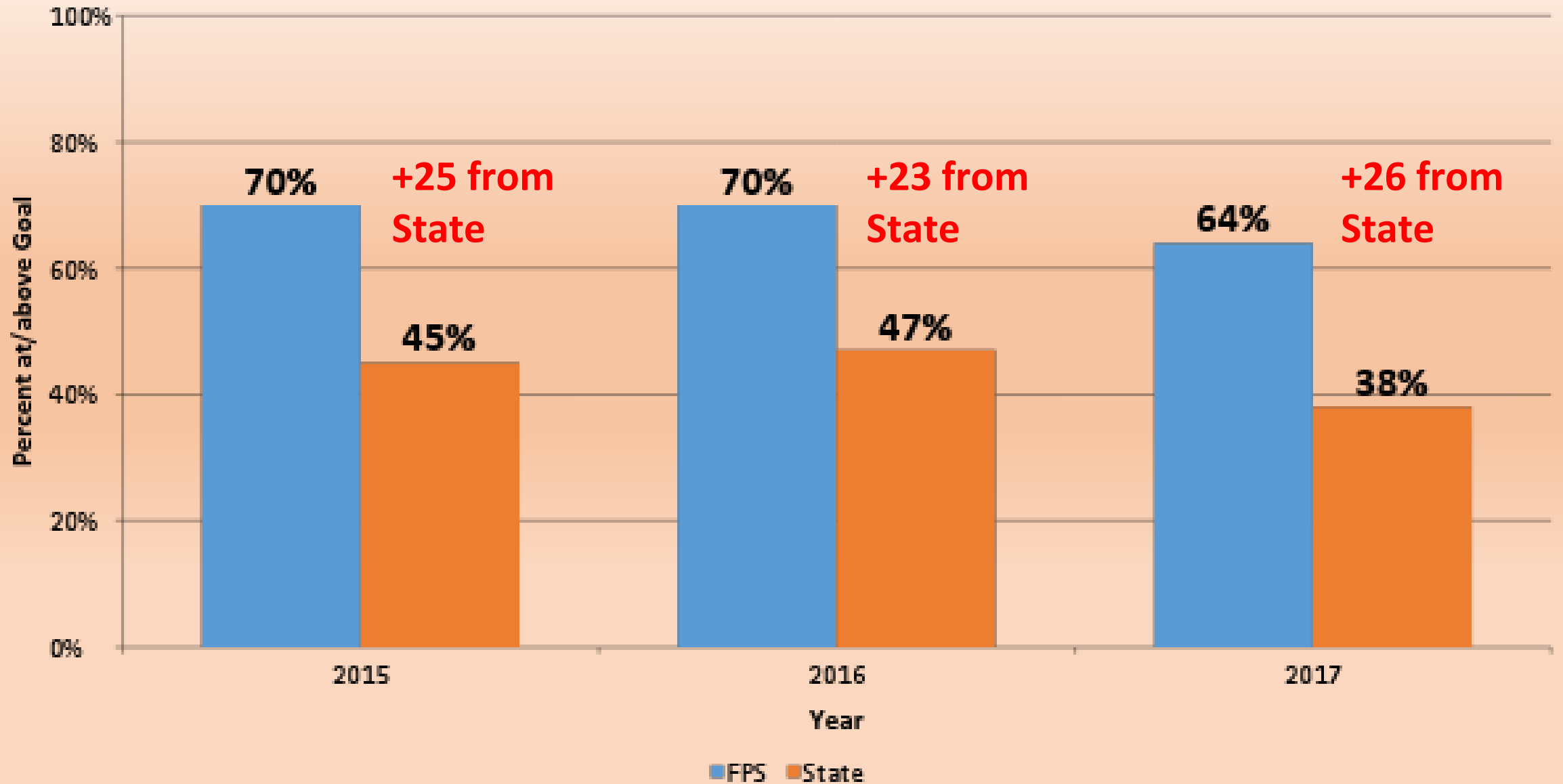
FPS Grade 5 CMT



FPS Grade 8 CMT



FPS Grade 10 CAPT



2017 CAPT Science DRG A Performance

District	District Reference Group (DRG)	Percent At or Above Goal
Regional School District 09	A	73%
New Canaan School District	A	72%
Ridgefield School District	A	71%
Westport School District	A	69%
Fairfield School District	B	64%
Weston School District	A	62%
Wilton School District	A	61%
Darien School District	A	60%

2017 CAPT Science DRG B Performance

District	District Reference Group (DRG)	Percent At or Above Goal
Simsbury School District	B	75%
West Hartford School District	B	71%
Trumbull School District	B	69%
Farmington School District	B	68%
Greenwich School District	B	68%
Regional School District 05	B	68%
Granby School District	B	67%
Monroe School District	B	66%
Regional School District 15	B	65%
Fairfield School District	B	64%
Avon School District	B	64%
Newtown School District	B	63%
New Fairfield School District	B	62%
Guilford School District	B	61%
South Windsor School District	B	57%
Brookfield School District	B	53%
Cheshire School District	B	52%
Madison School District	B	44%

Moving Forward: Secondary Science

- Identified NGSS Science and Engineering Practices as an area in need of further growth
- Provide Professional Development to continue to support teachers and administrators on the transition to NGSS

Program Evaluation

Dr. Gregg Pugliese

Director of PK-12 Social Studies & Student Centered Learning

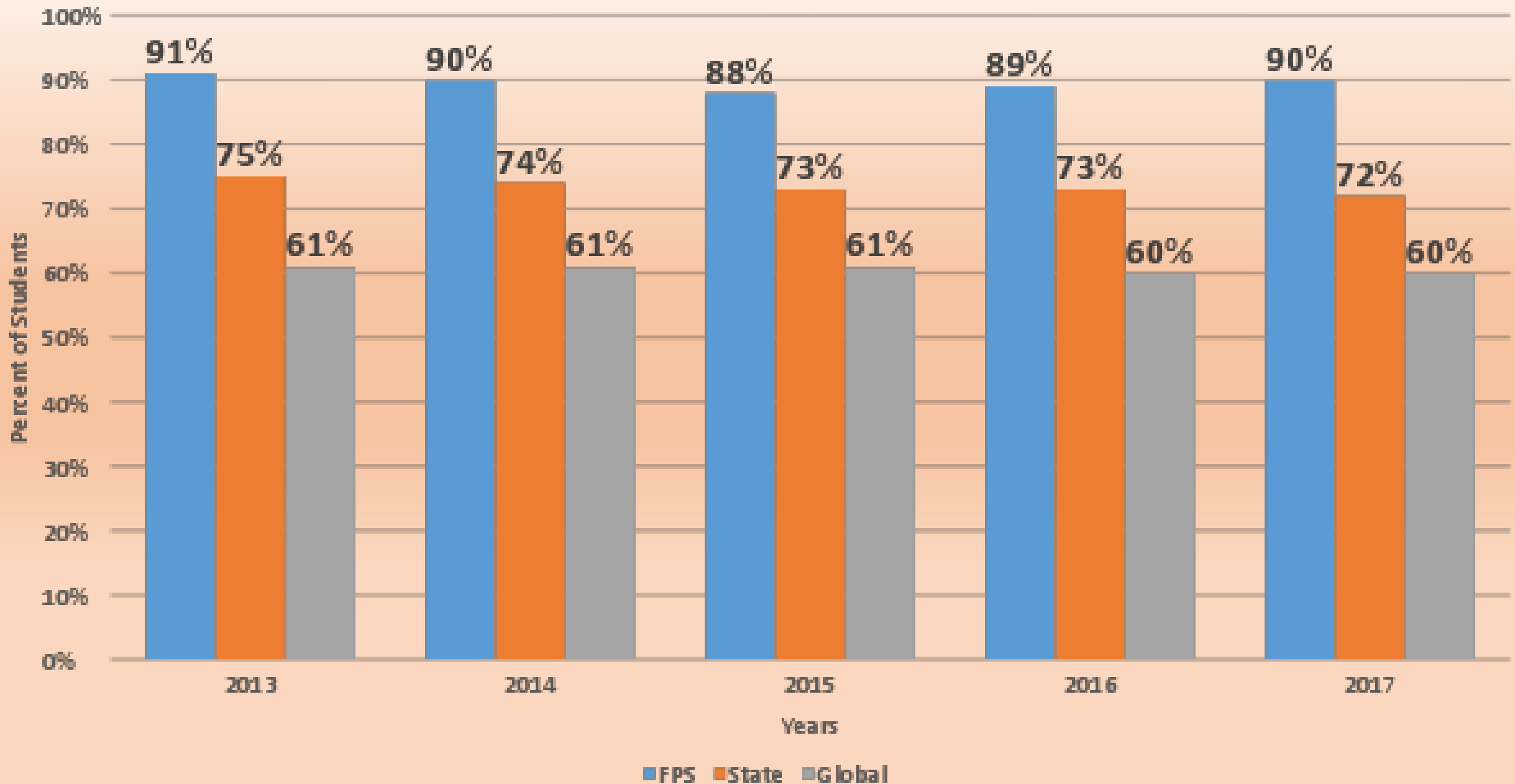
Program Evaluation

- Use of Data to Improve Curriculum and Instruction
- Classroom Observations
- Feedback from Teachers, Students, and Families
- Adapt to Changing Standards, Laws and Community Expectations
 - Graduation Requirement Changes
 - NEASC evaluation
 - Portrait of a Graduate

Advanced Placement Five-Year Summary

Year	Total AP Students	Number of Exams	% of Total AP Students with Scores 3+
2012-2013	600	1196	90.5%
2013-2014	642	1220	90.0%
2014-2015	679	1333	87.6%
2015-2016	698	1336	89.4%
2016-2017	672	1361	90.3%

Percent of Total AP Students with 3+



AP Course Redesigns by Year

2011-2012

AP French Language and Culture

2012-2013

AP Biology, AP Latin

2013-2014

AP Chemistry, AP Spanish
Language and Culture

2014-2015

AP Physics 1, AP Physics 2,
AP U.S. History

2015-2016

AP European History

2016-2017

AP Calculus AB, AP Calculus BC,
AP Computer Science

2018-2019

AP U.S. Government and Politics

AP Psychology

Year	Total Enrollment	Number of Exams	% of Students with Score 3+
2011-2012	*	18	67%
2012-2013	*	18	62%
2013-2014	*	20	67%
2014-2015	76	49	90%
2015-2016	145	90	81%
2016-2017	108	71	90%
2017-2018	180	*	*

Moving Forward: Program Evaluation

- Continue professional learning to adapt to changing standards and instructional practices
 - Revised High School Graduation Requirements
 - Revisions to the Curriculum Renewal Cycle
- Provide Professional Development and communication to support staff and community through changes
- Continue to improve functioning of data teams and collaborative planning teams

FPS Curriculum Revision Cycle

Subject	Grade	15-16	16-17	17-18	18-19	19-20	20-21	21-22
Music	PK-5	Implement	Review	Revise / Approve	Implement	Implement	Implement	Status Update
Science	PK-12	Implement	Review	Revise / Approve	Implement 9-12	Implement	Implement	Status Update
Music	6-12	Implement	Implement	Review	Revise / Approve	Implement	Implement	Implement
Art	PK-12	Implement	Implement	Implement	Review	Revise / Approve	Implement	Implement
Health	PK-12	Implement	Implement	Implement	Review	Revise / Approve	Implement	Implement
Physical Education	PK-12	Implement	Implement	Implement	Review	Revise / Approve	Implement	Implement
Math	PK-12	Status Update	Implement	Implement	Implement	Review	Revise / Approve	Implement
Dev. Guidance	6-12	Implement	Implement	Implement	Implement	Review	Revise / Approve	Implement
English / Lang. Arts	PK-12	Implement	Status Update	Implement	Implement	Implement	Review	Revise / Approve
Business	9-12	Implement	Implement	Implement	Status Update	Implement	Implement	Review
Technology Ed.	6-12	Implement	Implement	Status Update	Implement	Implement	Implement	Review
Library Media Sci.	K-12	Implement	Implement	Status Update	Implement	Implement	Implement	Implement
World Language	3-12	Implement	Implement	Implement	Status Update	Implement	Implement	Implement
Computer App.	6 & 8	Revise / Approve	Implement	Implement	Implement	Status Update	Implement	Implement
Social Studies	PK-12	Revise / Approve	Implement	Implement	Implement	Status Update	Implement	Implement
Family Con. Science	6-12	Review	Revise / Approve	Implement	Implement	Implement	Status Update	Implement

Secondary Language Arts

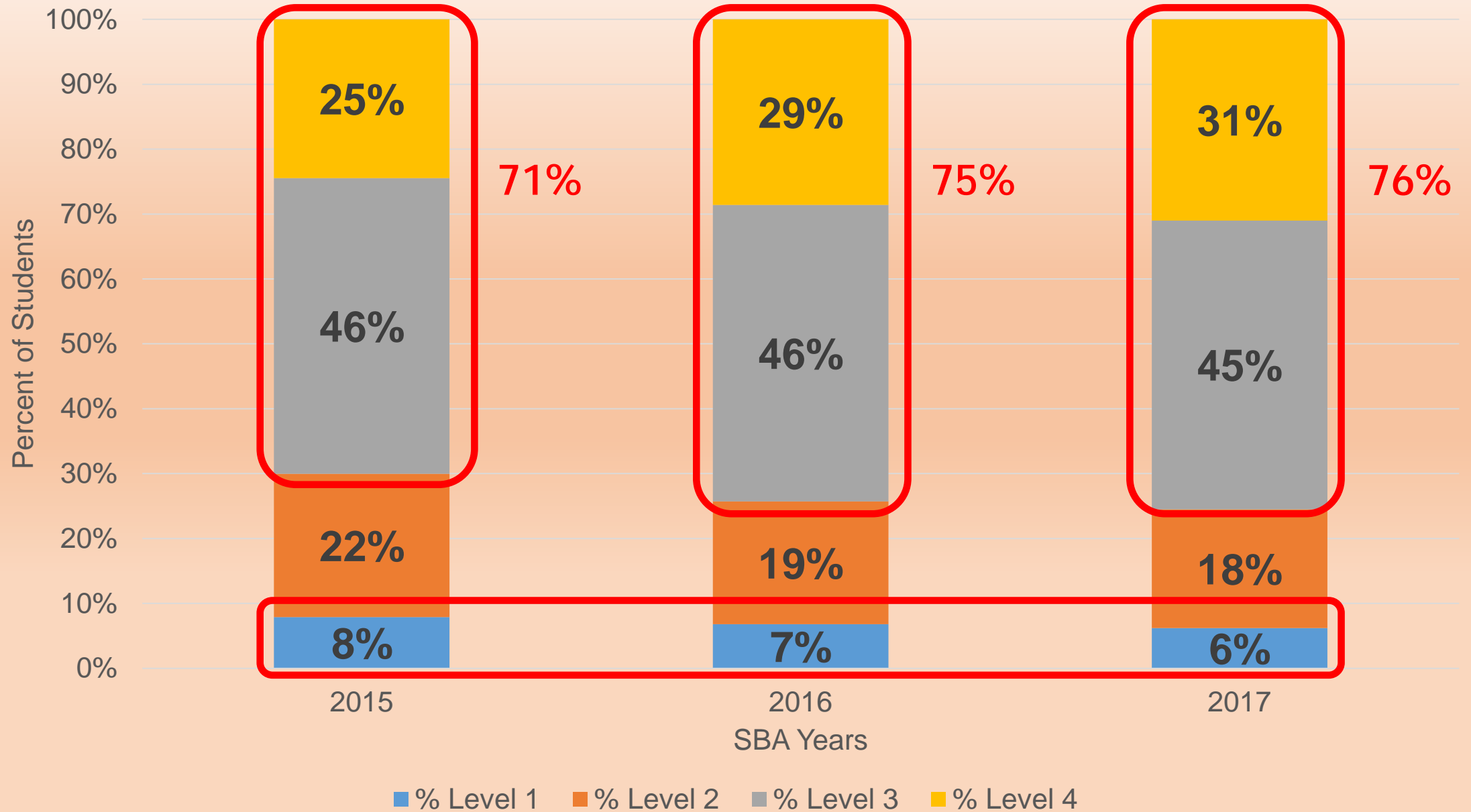
John Chiappetta

Director of Secondary Literacy & Learning

Secondary Language Arts

- Consistent Growth in Grade 8
- Strength of MS curriculum
- Analyzed assessment data and identified areas for growth
- Teacher teams designed instructional tasks and assessments targeting needs identified in the data
- Continued focus on question types and patterns.

Grade 8 SBA ELA: 2015-2017



Grade 8 Regional ELA SBA Scores

District	2015	2016	2017	Change 15 to 17
Fairfield	70%	74%	76%	6%
Greenwich	76%	77%	78%	1%
Ridgefield	79%	81%	74%	-5%
Westport	85%	81%	73%	-12%
Weston	72%	78%	73%	1%
Wilton	87%	82%	73%	-14%
West Hartford	69%	67%	71%	2%

Moving Forward: Secondary Language Arts

- Utilize SRBI for early intervention in Reading and Writing
- Analyze assessment data to individualize instruction
- Continue professional development of teachers

Elementary Language Arts

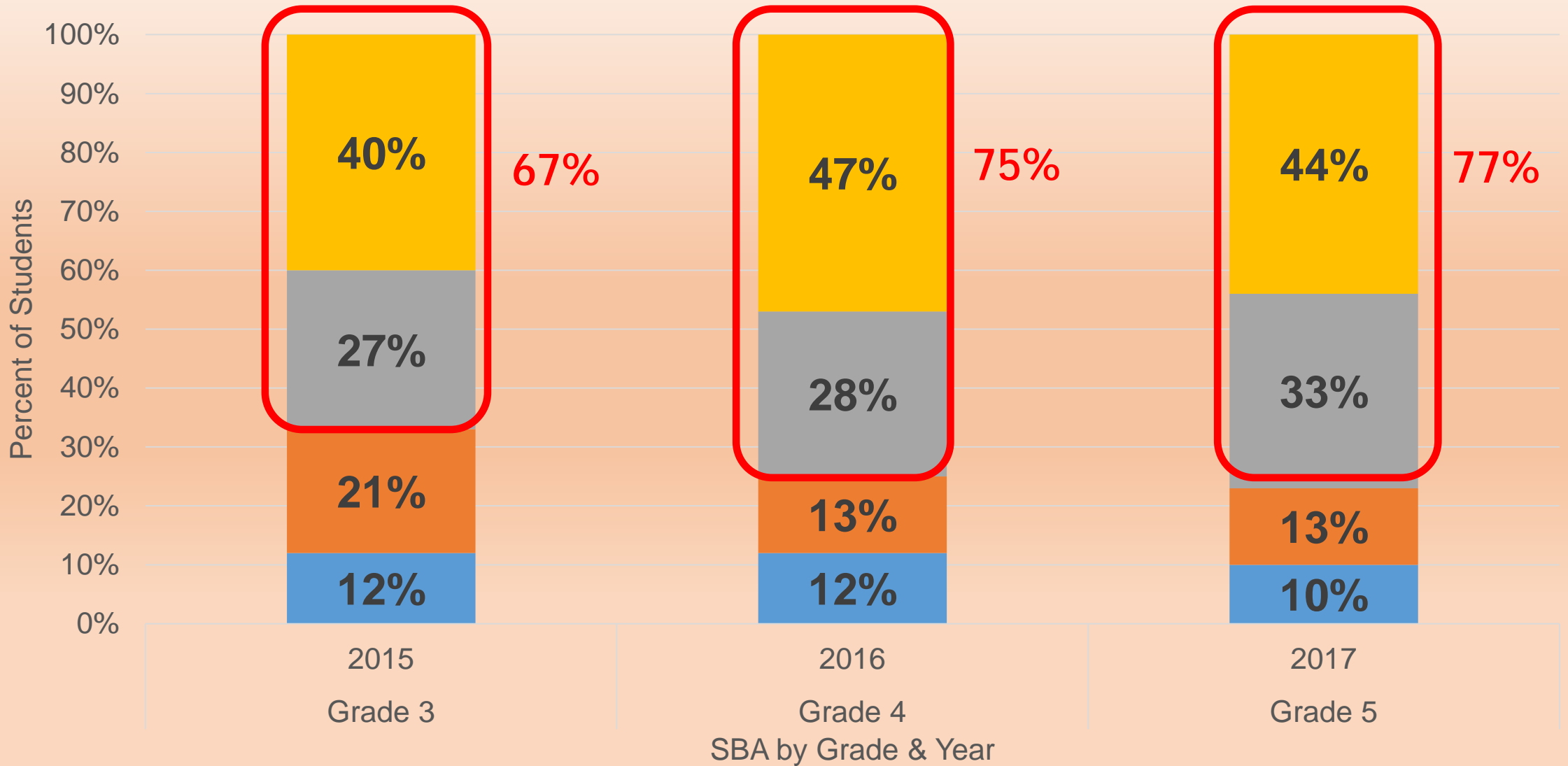
Pamela Khairallah

Director of Primary Literacy & Learning, ELL, and SRBI

Elementary Language Arts

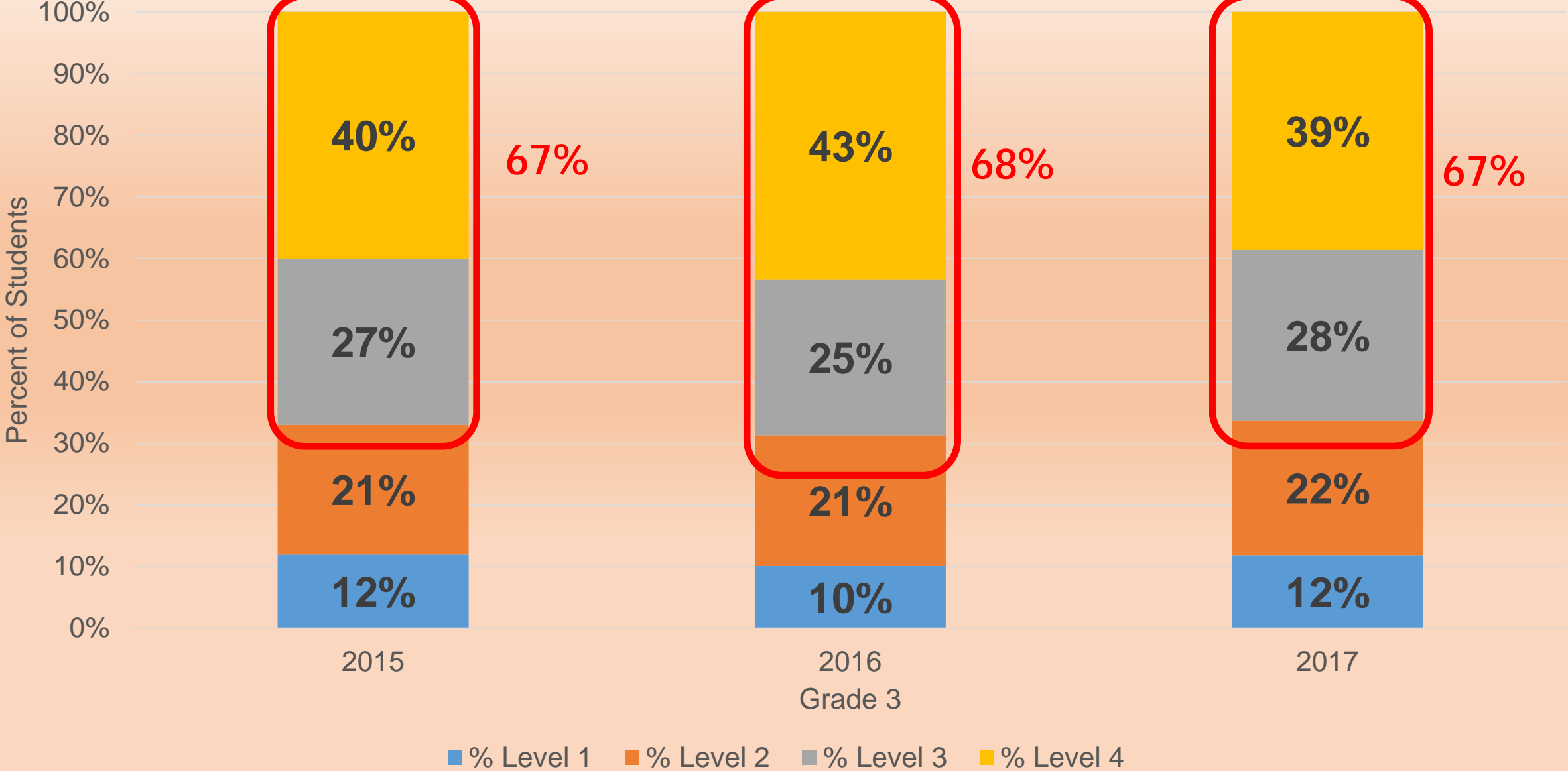
- Steady Growth from grades 3 to 5
- Strengths in grade 4-5 core curriculum
- Efficacy of peer to peer coaching in grades 4 and 5
- Focus of interventions in grades 3-5 results in gains
- Streamlined data collection tools and process

SBA Cohort: 2015 to 2017



■ % Level 1 ■ % Level 2 ■ % Level 3 ■ % Level 4

Grade 3 SBA: 2015-2017



Grade 3 Regional ELA SBA Scores

District	2015	2016	2017	Change 15 to 17
Fairfield	67%	68%	67%	0%
Darien	83%	83%	79%	-4%
Greenwich	79%	76%	78%	-1%
Westport	86%	83%	80%	-6%
West Hartford	72%	72%	71%	-1%
Monroe	90%	73%	81%	-9%
Trumbull	82%	81%	75%	-7%

Moving Forward: Elementary Language Arts

- Focus on SRBI as early intervention
- Provide teachers in grades K-2 professional development in phonics and reading foundations
- Continue professional development of coaches and teachers
- Integration of Social Studies, Library and Media and Language Arts curriculum and instruction to provide more digital reading and writing experiences

Special Education

Rob Mancusi

Executive Director of SPED and Special Programs

Special Education

- Continue focus of ongoing improvement to the District's SRBI procedures
- Continue to provide appropriate professional development opportunities to special education staff
- Continue collaboration between general education and special education staff
- Continue to analyze delivery of services models (push in, pull out, co-teaching)

Students with Disabilities Grade 3 ELA SBA: 2016-2017

Percentage of Students with Disabilities performing at each level of SBA

SBA Levels	Fairfield	State
Level 4: Exceeding	12.5% 23.6%	5.8% 15.3%
Level 3: Meeting	11.1%	9.5%
Level 2: Approaching	30.6%	21.1%
Level 1: Not Meeting	45.8%	63.6%

Students with Disabilities Grade 3 ELA SBA: 2016-2017

Percentage of Students with Disabilities performing at each level of SBA

SBA Levels	Fairfield	Greenwich	Trumbull	West Hartford	Westport
Level 4: Exceeding	12.5% 23.6%	9.1% 36.4%	16.7% 33.4%	14.7% 26.5%	N/A 21.2%
Level 3: Meeting	11.1 %	27.3%	16.7%	11.8%	N/A
Level 2: Approaching	30.6%	28.8%	33.3%	22.1%	36.4%
Level 1: Not Meeting	45.8%	34.8%	33.3%	51.5%	42.4%

Students with Disabilities Grade 3-5 Cohort

ELA SBA: 2015-2017

Percentage of Students with Disabilities performing at each level of SBA

SBA Levels	Grade 3	Grade 4	Grade 5
Level 4: Exceeding	7.7% 25.6%	12.3% 29.6%	6.7% 32.5%
Level 3: Meeting	17.9%	17.3%	25.8%
Level 2: Approaching	32.1%	27.2%	22.5%
Level 1: Not Meeting	42.3%	43.2%	44.9%

Areas of Focus Moving Forward continued

- Continue to strengthen capacity of special education and related services staff on the administration of comprehensive literacy assessments to inform targeted instruction in this area
- Continue to strengthen analysis and interpretation of student progress monitoring data on IEP goals and objectives to promote mastery and to inform targeted instruction

English Learners

John Chiappetta

Director of Secondary Literacy & Learning

English Learners

Number of countries of origin: 52		Number of languages spoken: 28	
India	Germany	Urdu	Mandarin
Syria	Brazil	Spanish	Kurdish
Russia	Bulgaria	Russian	Turkish
Egypt	Hungary	German	Telegu
Guatemala	China	Hungarian	Hausa
Mexico	Nepal	Bulgarian	Pashto
Columbia	Pakistan	Arabic	Khmer
Korea	Turkey	Bengla	Tagalog
	Chad	Farsi	

Fairfield English Learner Enrollment

Year	Number of English Learners	
2013-2014	214	
2014-2015	229	+47
2015-2016	221	22.0% Increase
2016-2017	251	
2017-2018	261	

Over the past year:

Added 52 Students, while 42 left the district

English Learners: Proficiency Levels

Level 1 & 2: 44%

- **Level 1 - Basic**

- Students at this level have very limited or no understanding of English

- **Level 2 - Low Intermediate**

- These students can understand short conversations on simple topics

Level 3 & 4: 56%

- **Level 3 - High Intermediate**

- At this level students can understand standard speech delivered in most settings with some repetition and rewording

- **Level 4 - Proficient**

- Students at this level have adequate language skills for day-to-day communication

LAS Links Proficiency Level by Grade Level

Grade Level	Level 1	Level 2	Level 3	Level 4
Elementary School	29%	23%	39%	10%
Middle School	14%	17%	46%	23%
High School	16%	18%	51%	16%
District	24%	21%	42%	14%

Moving Forward: English Learner Program

- Consider a *Newcomer Academy* for Level 1 and Level 2 ELs
- Provide cultural awareness training for all staff
- Integrate ELs into the SRBI process
- Identify social and emotional needs of EL students
- Provide family support programs, possibly with community collaboration
- Support general education teachers with professional development

STAR Math & Reading

Darla Miner

Executive Director of Innovation, Curriculum and Programs

STAR Reading Baseline 2016-2017 Grade Equivalent (GE)

Grade	Fall 2016	Spring 2017	Change
2	2.7	3.8	+1.1
3	3.7	4.8	+1.1
4	5.1	6.2	+1.1
5	6.2	7.4	+1.2
6	7.3	8.3	+1.0
7	8.1	9.0	+0.9
8	9.4	10.1	+0.7
9	9.7	10.2	+0.5

STAR Math Baseline 2016-2017 Grade Equivalent (GE)

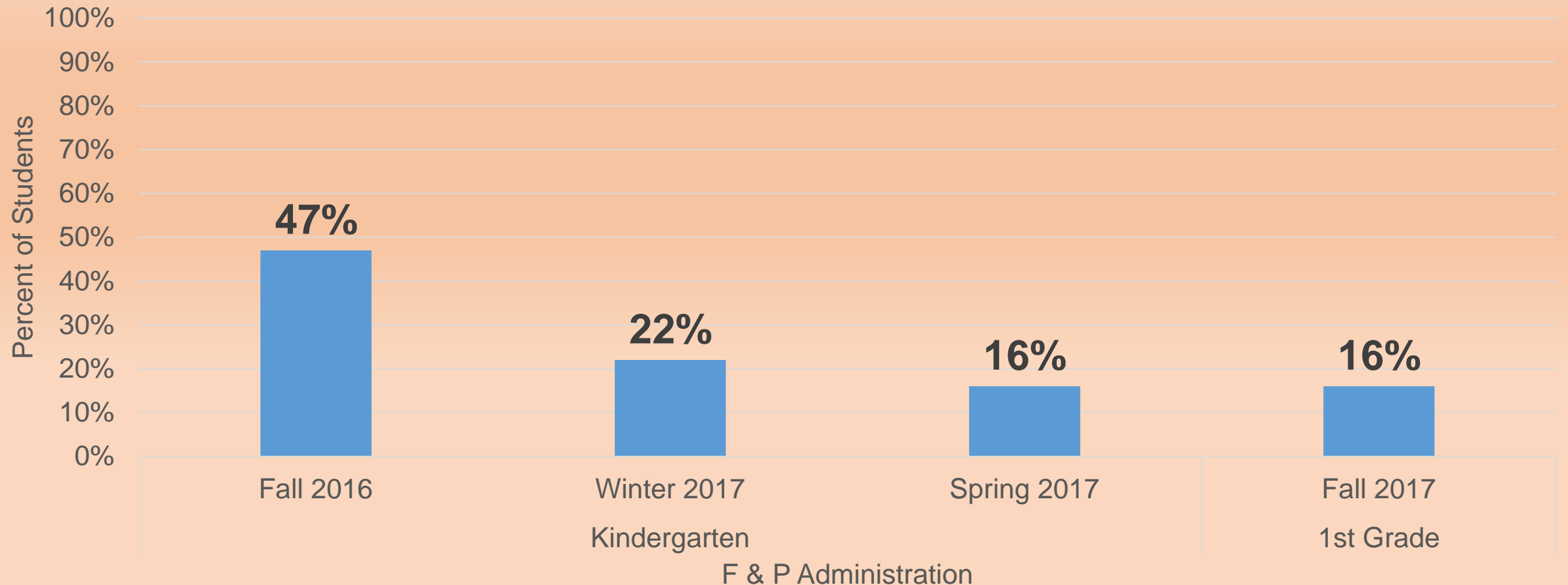
Grade	Fall 2016	Spring 2017	Change
1	1.3	2.5	+1.2
2	2.3	3.6	+1.3
3	3.5	5.0	+1.5
4	4.8	6.7	+1.9
5	6.3	9.2	+2.8
6	8.2	10.0	+1.8
7	9.6	10.8	+1.2
8	10.5	11.5	+1.0

SRBI Practices

- We use consistent tools to screen all students
- Students who are identified as needing more help, get more help

SRBI Cohort Example: At Risk Students

Elementary School: Students Below Benchmark F & P



Before we go . . .

- We use data to identify instructional strengths and growth goals and to drive professional learning for school leaders, teachers and support staff
- We prioritize resources to maximize student learning under an SRBI framework
- The most important work we do is to engage students and teachers in joyful learning as we improve daily instruction

Thank you!

Questions?