

Technical Advisory Panel Meeting

June 19, 2020





- Welcome & Introductions Elena & Dan
- **Legislative Update-** Lisa Medler
- WIDA ACCESS Growth Update- Marie Huchton
- WIDA ACCESS On-Track Growth Report- Marie Huchton
- High School On-Track Growth Marie Huchton
- Meeting Summary & Closing Elena & Dan



Welcome & Introductions



Welcome!

• The purpose of the TAP is to provide non-binding technical recommendations to CDE regarding the Colorado Growth Model, state accountability, and other topics as needed.

TAP Members Roll Call & Introductions

New Member: Joshua Quick, CEA Representative

Meeting Logistics:

- Non-members please add your Name/Affiliation to the chat box.
- Everyone please mute your sound.
- We ask all non-TAP members to hold any questions or comments until the end of the meeting. We do this to ensure we have sufficient time to address all meeting agenda items.





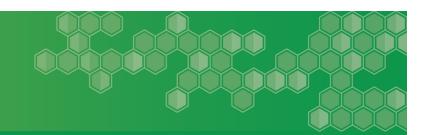
Legislative Update Concerning Stakeholder Advisory Group

Lisa Medler





Stakeholder Advisory Group



Pulled from C.R.S. 22-2-112. Commissioner Duties.

- Convene a stakeholder group to
 - Review the impact of the covid-19 pandemic and the resulting disruption of the 2019-20 school year, including student transition to remote learning and the cancellation of the state assessments, accountability, accreditation, and educator evaluation systems for the 2019-20 school year
 - —Discuss how the cancellation of state assessments will impact accountability, accreditation, and educator evaluations during the 2020-21 school year and whether future modifications are needed regarding the accountability, accreditation, and educator evaluation systems as a result of, and in response to, the covid-19 pandemic and possible further disruptions
 - Make recommendations regarding whether and how to proceed with state assessments, accountability, accreditation, and educator evaluations during the 2020-211 school year and how the systems can continue to effectively measure student achievement and growth and provide an accurate, credible, and comparable assessment of the quality of the public education system throughout the state following the covid-19 pandemic





WIDA ACCESS Growth Update

Marie Huchton

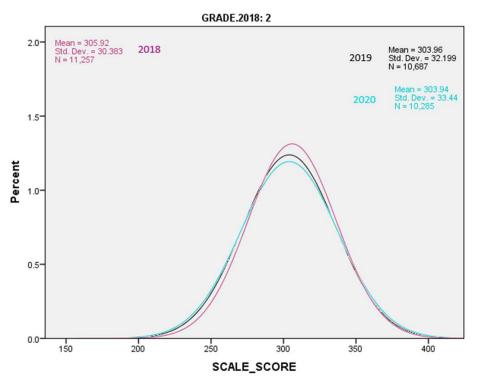




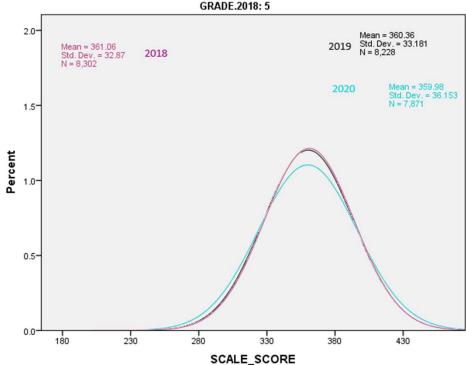
WIDA ACCESS Overall Scale Score Distributions - 2018, 2019, and 2020



• Grade 2 students



Grade 5 students

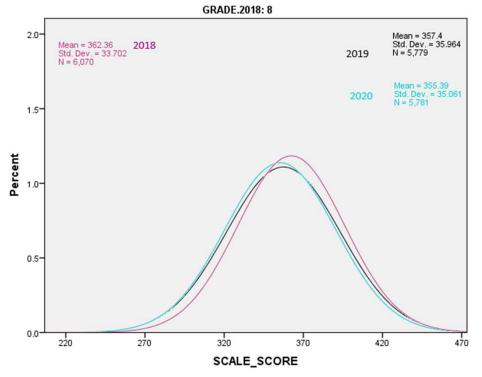




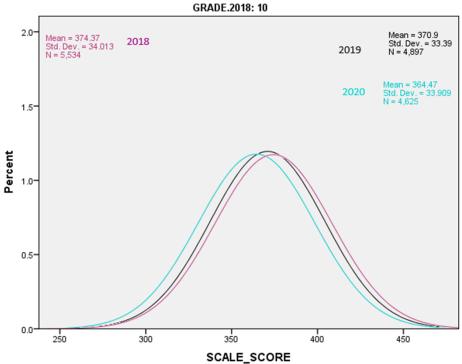
WIDA ACCESS Overall Scale Score Distributions - 2018, 2019, and 2020



• Grade 8 students



• Grade 10 students





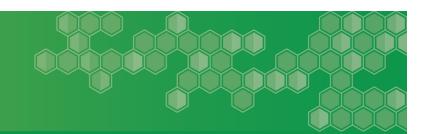
Note from Assessment



- When reviewing the spring, 2020 ACCESS for ELLs assessment results, a decrease in scores in the Writing domain was observed, primarily in grades 6-12. As we typically do when we receive unanticipated results, and because there was a change to the structure of the Writing test for 2020, we engaged with the vendor to review their scoring and equating procedures and results.
- Starting with the 2020 administration WIDA ACCESS changed the writing portion of the test from three items to two items to allow for an embedded field test item. The main difference created by dropping one writing prompt is that the number of available score points is decreased creating more of a "stair-step" cumulative distribution rather than a smooth curve. Less variation in scores across the population may lead to greater variance and possibly larger changes from year to year.



Note from Assessment

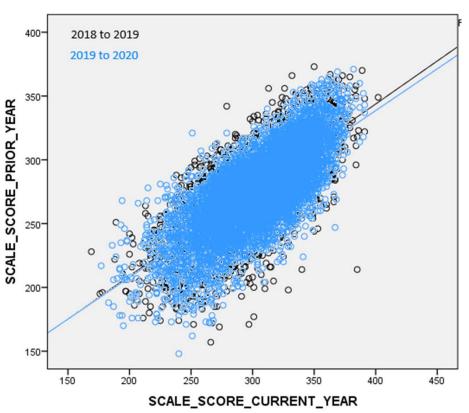


- However, the WIDA psychometrics team provided the overall equating results for the consortium, which did not show a significant change from the previous year's score distribution. Therefore, it appears that the change in structure of the writing portion had minimal effect across the consortium.
- Since the overall consortium did not show a decrease in performance it is most likely that the drop in performance is due to changes in the Colorado population at these grades. There have been changes to Colorado's redesignation criteria allowing for greater leeway to use a 'body of evidence' rather than a hard cut off set on WIDA scores. With more students being redesignated the remaining population will overall have lower ability over time.

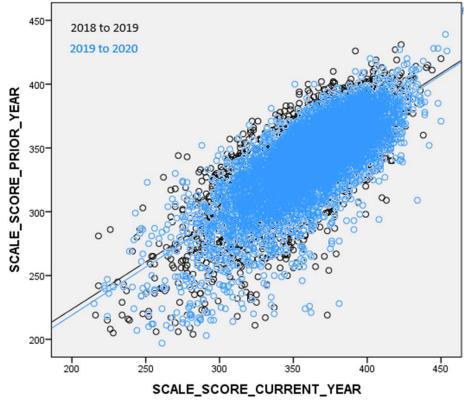


WIDA ACCESS Overall Between Year Scale Score Scatterplots- 2018 to 2019 and 2019 to 2020

Grade 1 to Grade 2 students



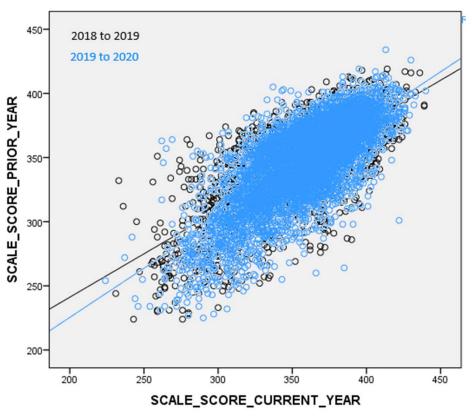
• Grade 4 to Grade 5 students



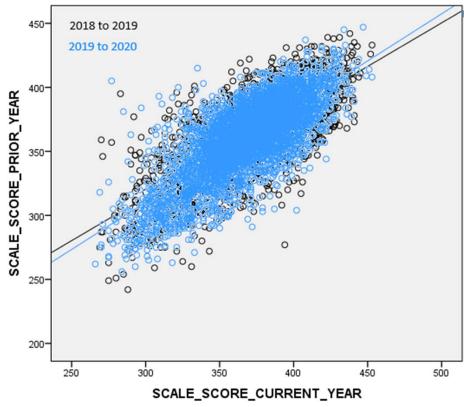


WIDA ACCESS Overall Between Year Scale Score Scatterplots- 2018 to 2019 and 2019 to 2020





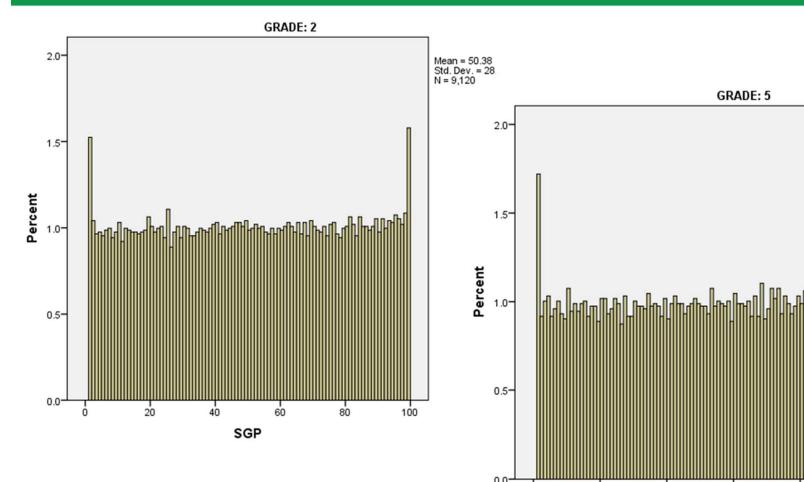
Grade 9 to Grade 10 students





Distribution of 2020 WIDA ACCESS Student Growth Percentiles (SGP)





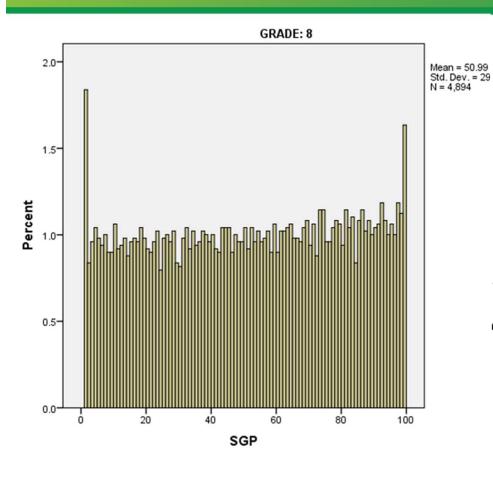


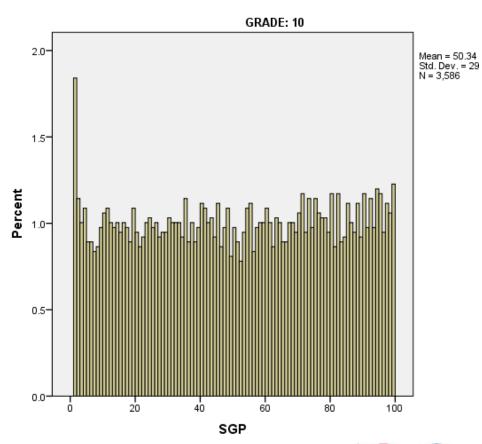
SGP

Mean = 50.8 Std. Dev. = 29.16 N = 6,975

Distribution of 2020 WIDA ACCESS Student Growth Percentiles (SGP)

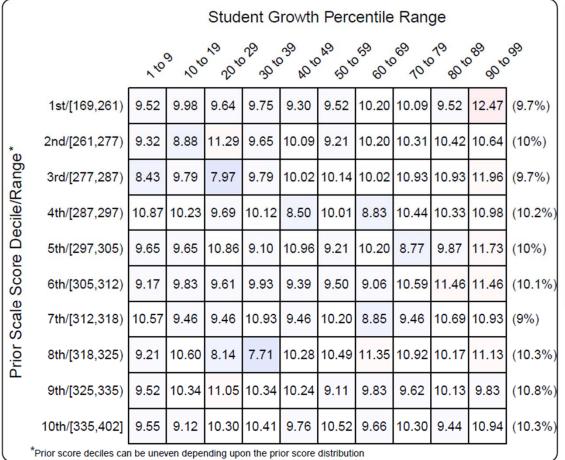


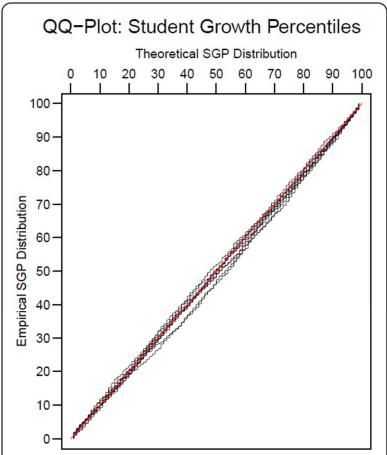






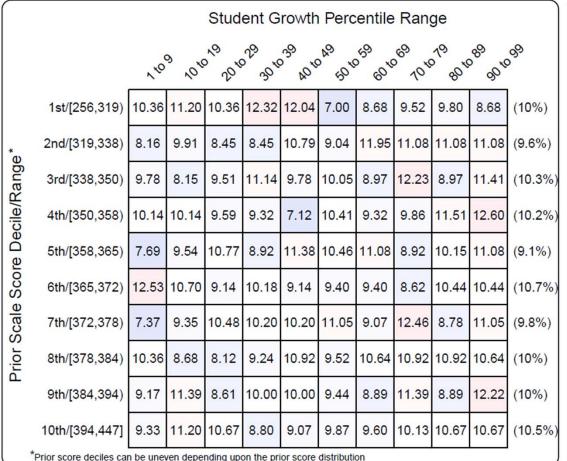
2020 WIDA ACCESS Goodness-of-Fit Results- Grade 2

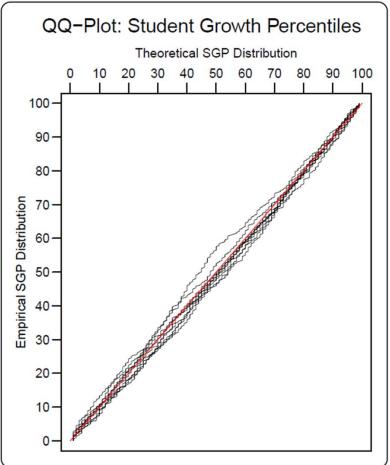






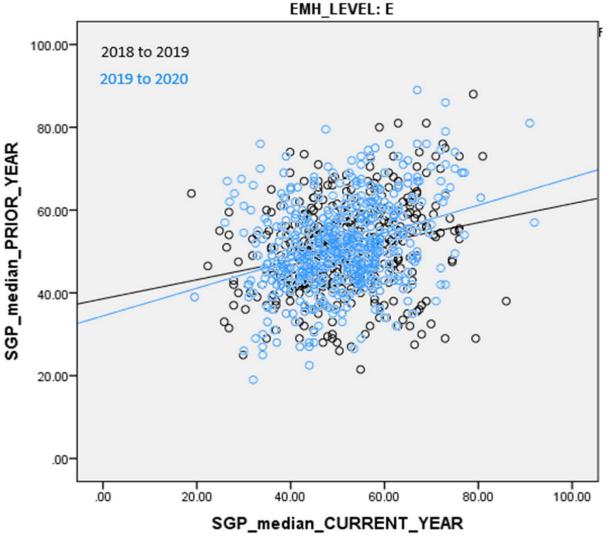
2020 WIDA ACCESS Goodness-of-Fit Results- Grade 10







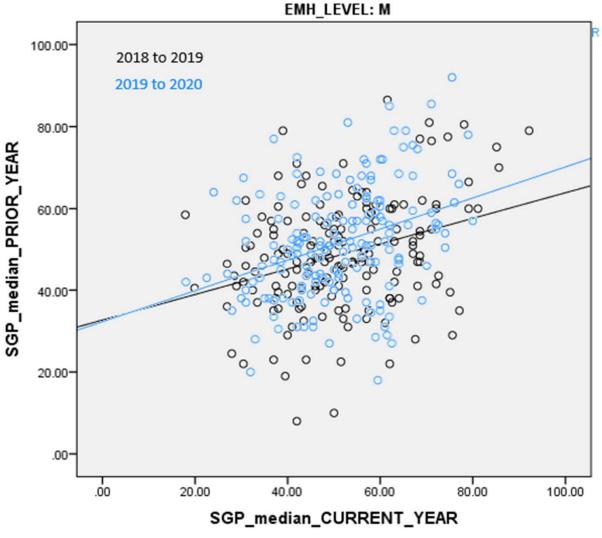
2020 WIDA ACCESS School-level Median Student Growth Percentile (MGP) Comparisons- Elementary



- 2018 to 2019 correlation = 0.240
- 2019 to 2020 correlation = 0.332



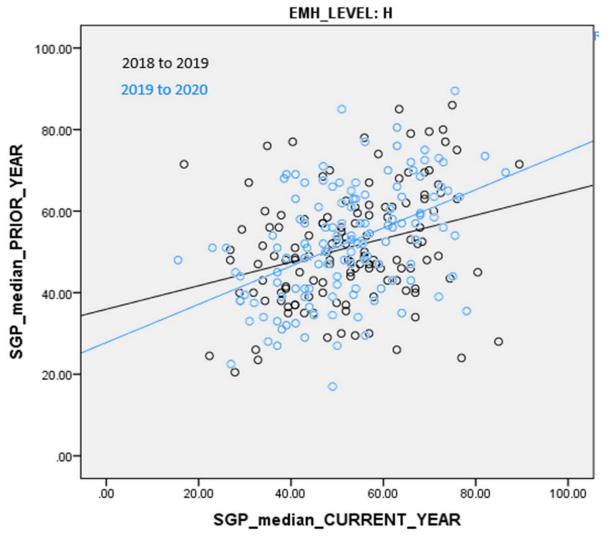
2020 WIDA ACCESS School-level Median Student Growth Percentile (MGP) Comparisons- Middle



- 2018 to 2019 correlation = 0.318
- 2019 to 2020 correlation = 0.347



2020 WIDA ACCESS School-level Median Student Growth Percentile (MGP) Comparisons- High



- 2018 to 2019 correlation = 0.293
- 2019 to 2020 correlation = 0.459



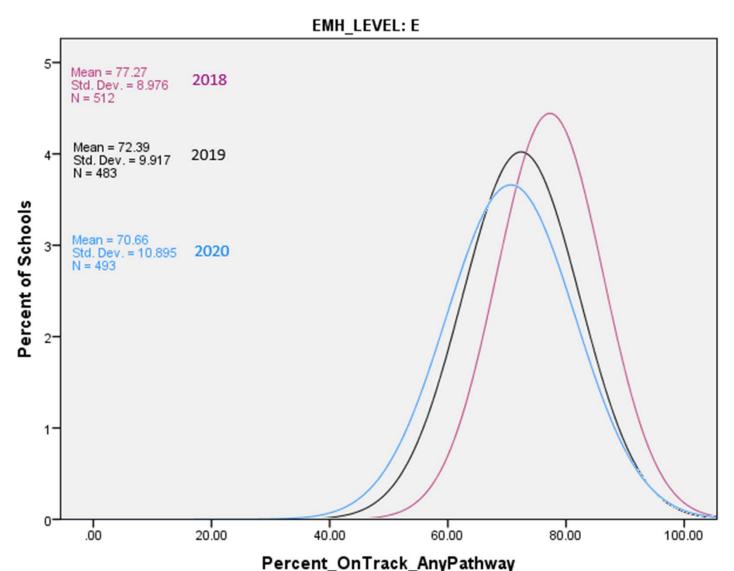
2020 WIDA ACCESS On Track Growth Overview

Proficiency Level Trajectory	Timeline	Relation to Redesignation Eligibility Criteria
Level 1 increasing to Level 2+	1 Year	6-year timeline to achieve
Level 2 increasing to Level 3+	2 Years	redesignation eligibility criteria
Level 3 increasing to Level 4+	3 Years	
Level 4 staying at Level 4+	1 Year	If scoring at/above redesignation
Level 5 staying at Level 5+	1 Year	eligibility criteria, maintain performance level

The 2017 WIDA ACCESS 2.0 proficiency level has been used as the baseline to set English-acquisition timelines for all ELs currently in program and to determine whether they are on or off-track in future years to meet their proficiency targets.

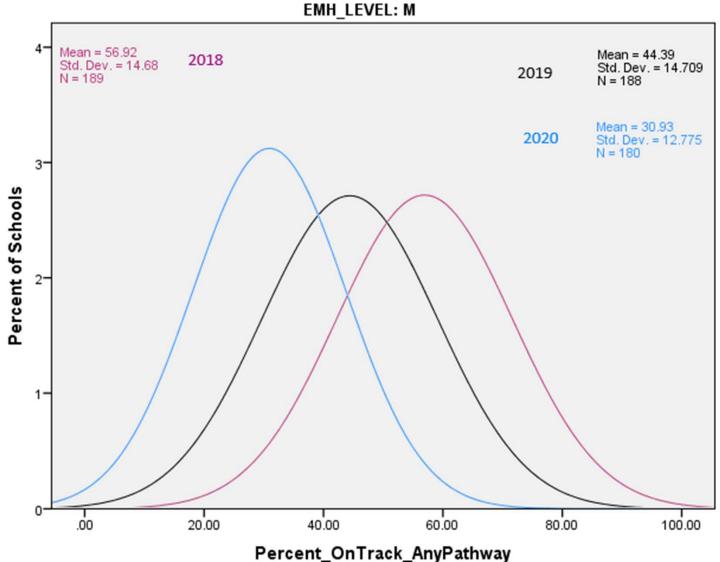
For ELs new to Colorado since 2017, their initial ACCESS performance will be used to establish a projected English-acquisition timeline and to determine whether they are on or off-track in future years to meet their proficiency targets.

2020 WIDA ACCESS Percent On Track Growth Distributions by Year- Elementary



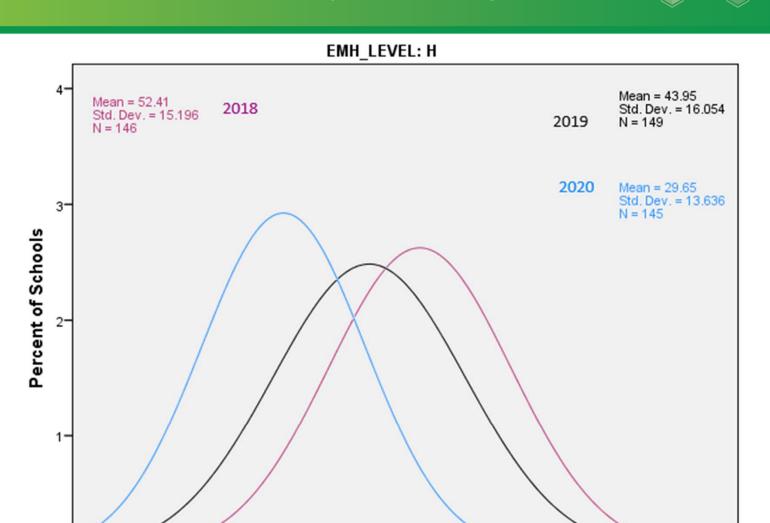








2020 WIDA ACCESS Percent On Track Growth Distributions by Year- High



40.00

Percent_OnTrack_AnyPathway

60.00

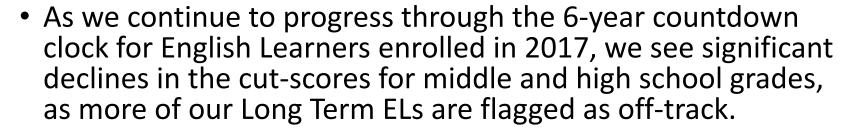
80.00

20.00



100.00

2020 WIDA ACCESS Percent On Track Growth Cut-scores Over Time



 Necessitates re-norming every year until we finish counting down for the 2017 EL cohort.

	Elementary			
	2018 2019		2020	
15th	68.8%	63.5%	60.0%	
50th	77.5%	72.4%	70.9%	
85th	86.2%	82.4%	81.1%	

	Middle			
	2018 2019		2020	
15th	43.1%	30.4%	19.0%	
50th	56.5%	42.9%	30.0%	
85th	73.1%	60.0%	42.9%	

	High				
	2018	2018 2019			
15th	39.7%	30.4%	18.9%		
50th	52.0%	45.2%	30.0%		
85th	71.8%	63.0%	45.9%		





WIDA ACCESS On Track Growth Report

Marie Huchton





Intention of On Track Growth Individual Student Reports



- Inform teachers and parents where the student currently stands on the 6-year countdown clock- i.e. provide Anticipated Years to Fluent English Proficiency (AYFEP)
- Show history of students achievement and growth results over time
- Provide current year On Track Target and indicate whether student is on or off track
- Provide future year On Track Target to indicate how difficult attaining next target will be
- Other uses we should be thinking of?



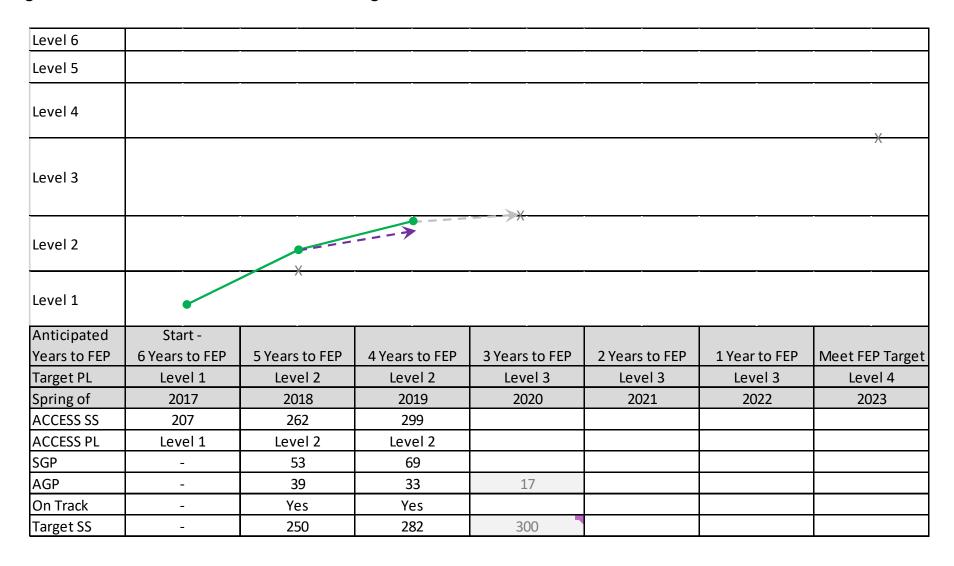
Note About Report Mock-Ups



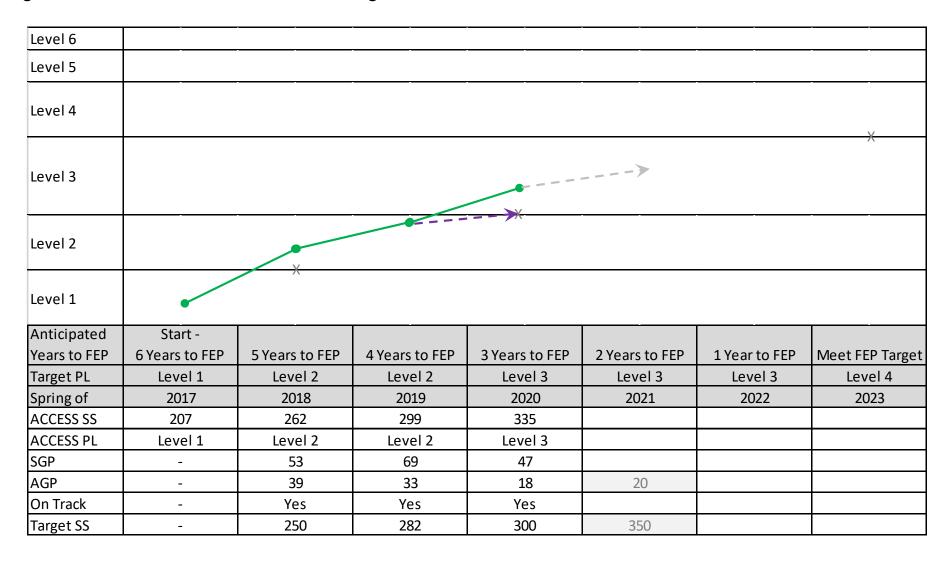
- WIDA ACCESS is vertically scaled, however for ease of making mockups, the achievement levels across grades are represented by simple horizontal lines
- Linear score trajectories are simplifications, real reports will use the scale scores associated with the growth targets as inflection points for each year



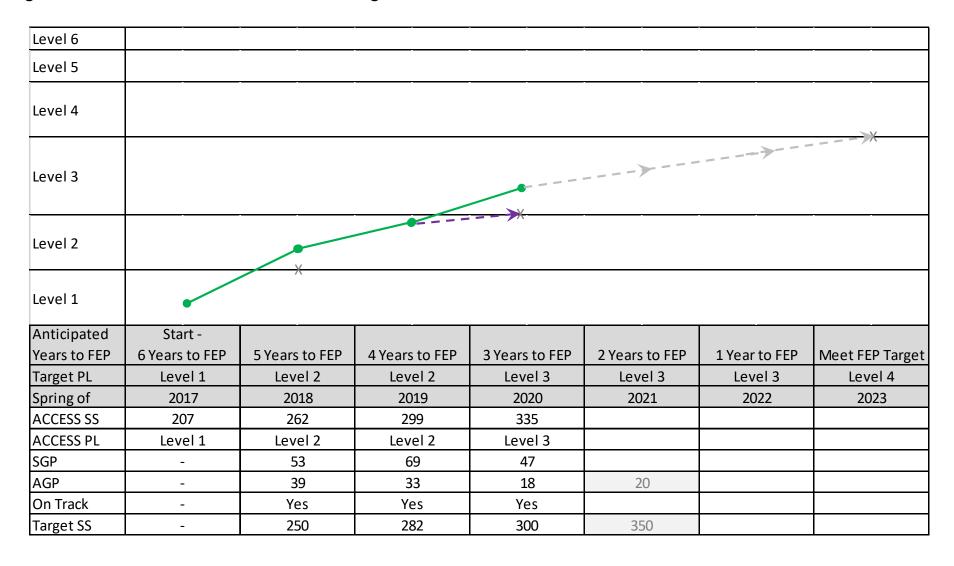
Example Student 1a- first tested at level 1, given full 6 year clock, and initially on track



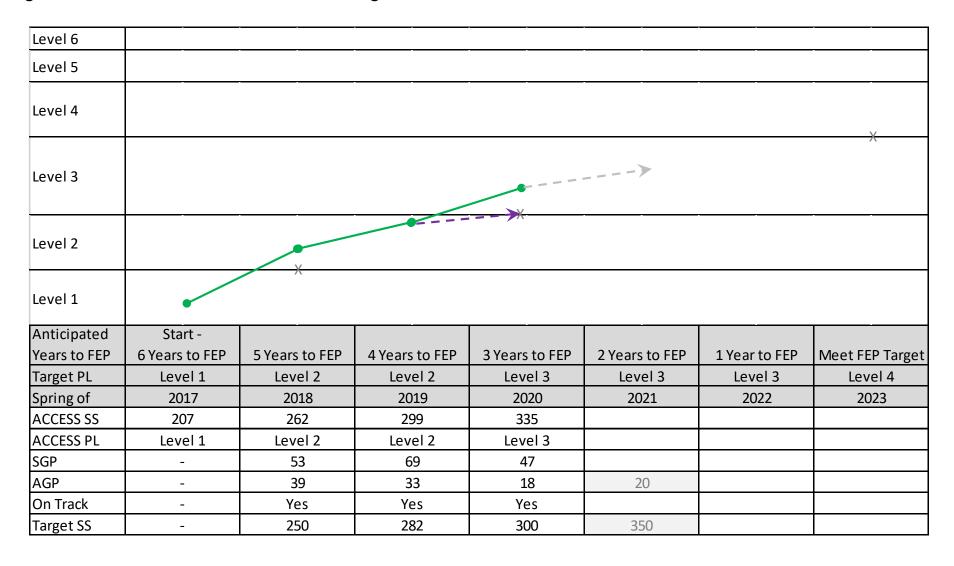
Example Student 1b- first tested at level 1, given full 6 year clock, and initially on track



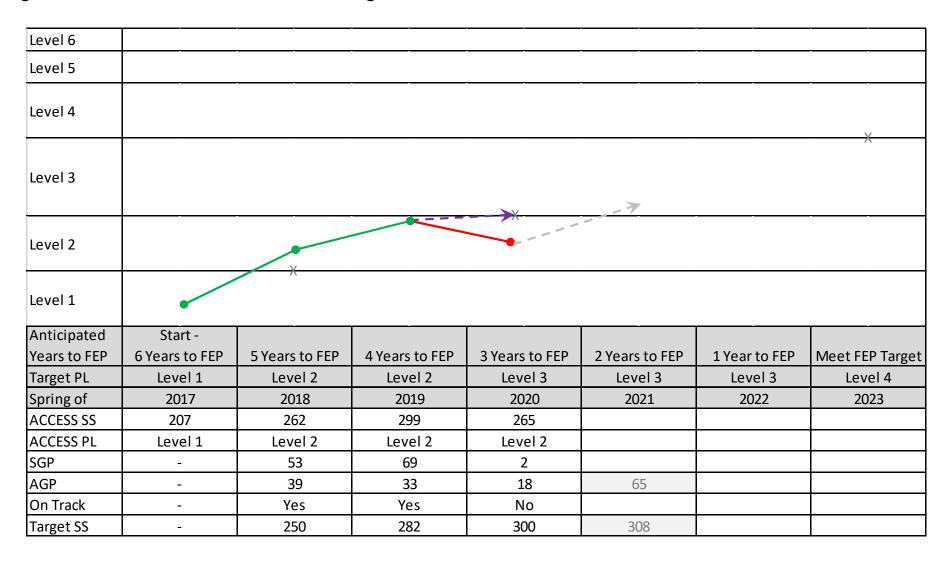
Example Student 1b- first tested at level 1, given full 6 year clock, and initially on track



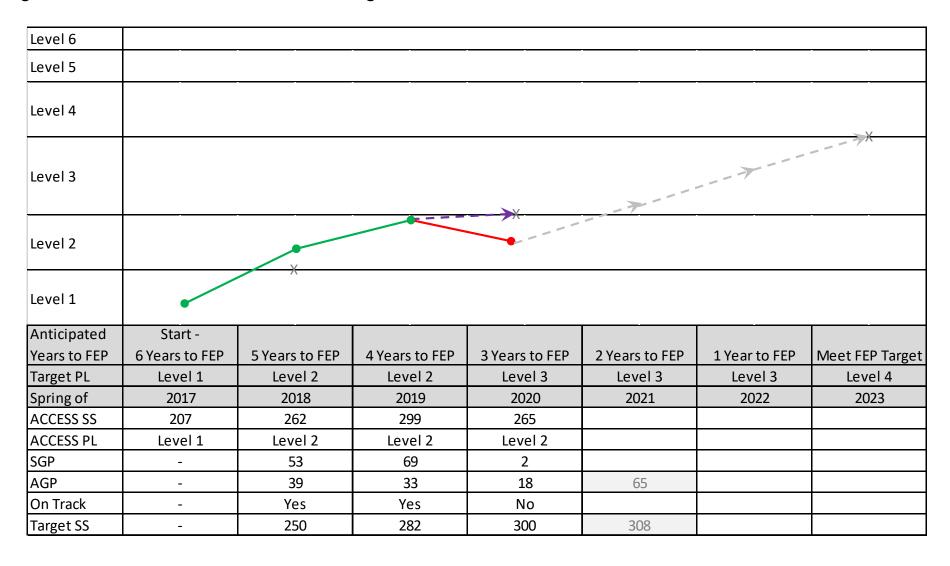
Example Student 1b- first tested at level 1, given full 6 year clock, and initially on track



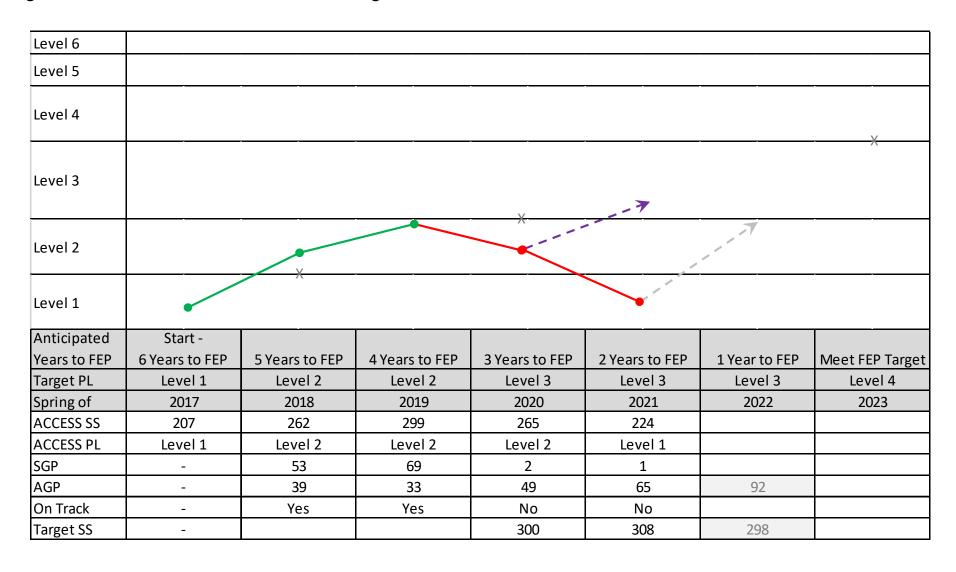
Example Student 1c- first tested at level 1, given full 6 year clock, and initially on track



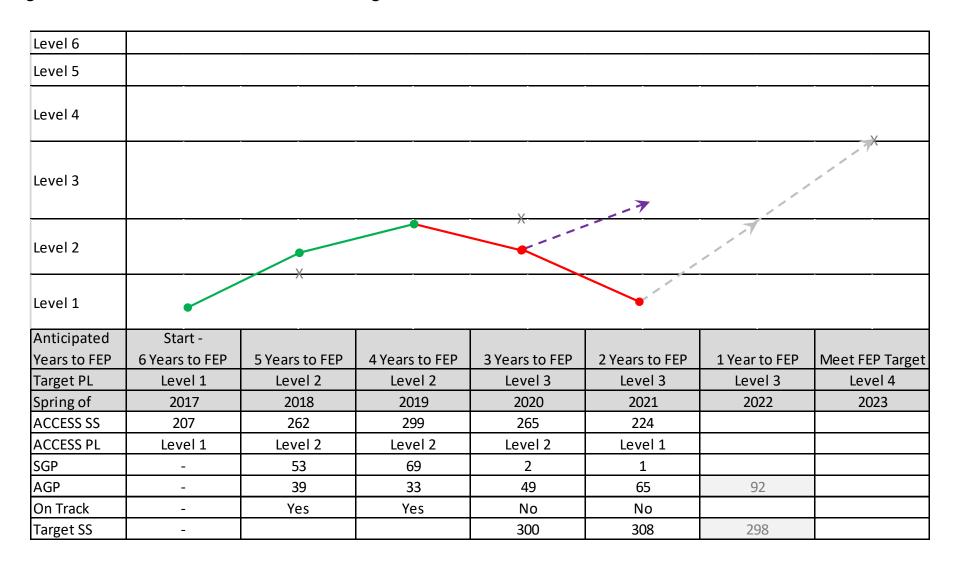
Example Student 1c- first tested at level 1, given full 6 year clock, and initially on track



Example Student 1d- first tested at level 1, given full 6 year clock, and initially on track



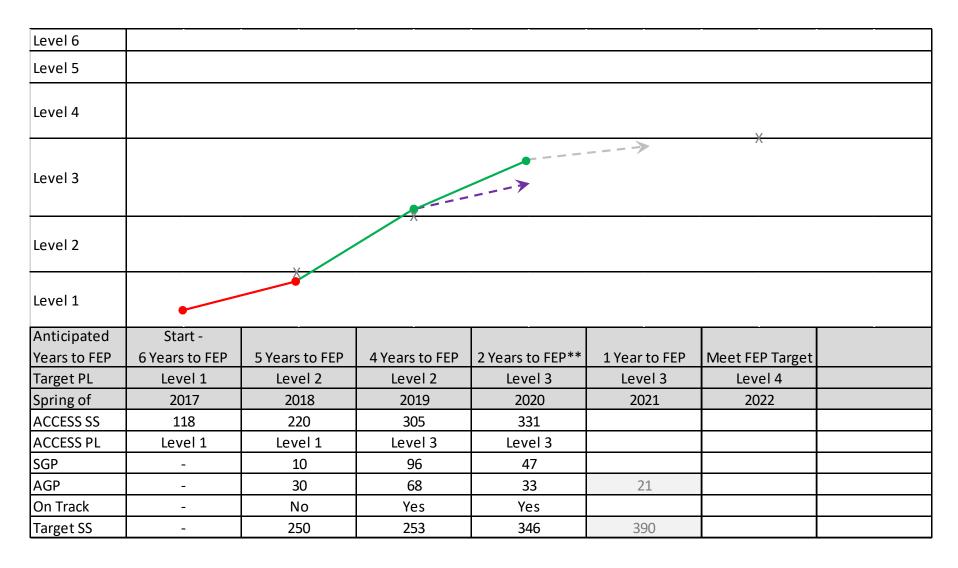
Example Student 1d- first tested at level 1, given full 6 year clock, and initially on track



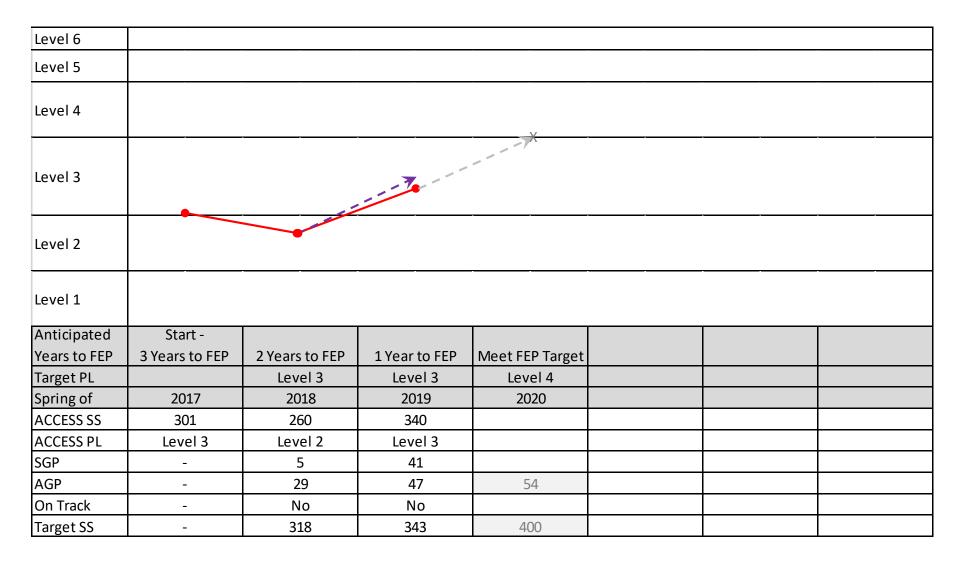
Example Student 2a- first tested at level 1, accelerated progress so AYFEP reset

Level 6					-		
Level 5	-				·		
Level 3							
Level 4						X	
Level 3			*	>		*	
Level 2	* 7						
Level 1							
Anticipated	Start -				<u> </u>		
Years to FEP	6 Years to FEP	5 Years to FEP	4 Years to FEP	2 Years to FEP**	1 Year to FEP	Meet FEP Target	
Target PL	Level 1	Level 2	Level 2	Level 3	Level 3	Level 4	
Spring of	2017	2018	2019	2020	2021	2022	
ACCESS SS	118	220	305				
ACCESS PL	Level 1	Level 1	Level 3				
SGP	-	10	96				
AGP	-	30	68	31			
On Track	-	No	Yes				
Target SS	-	250	253	346			
** AYFEP Traje	ctory has reset as	student moved fa	aster than anticipa	ated in achieving L	evel 3		

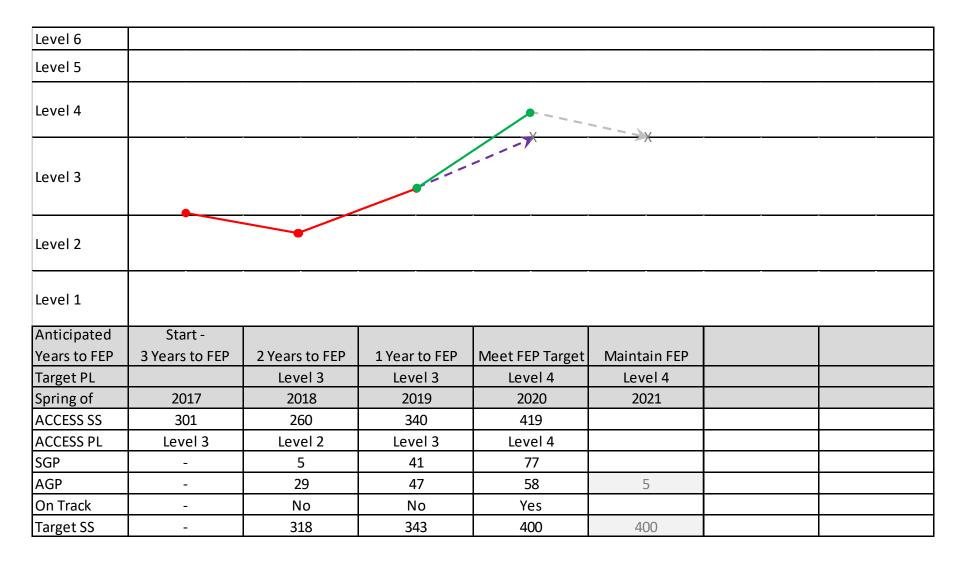
Example Student 2b- first tested at level 1, accelerated progress so AYFEP reset



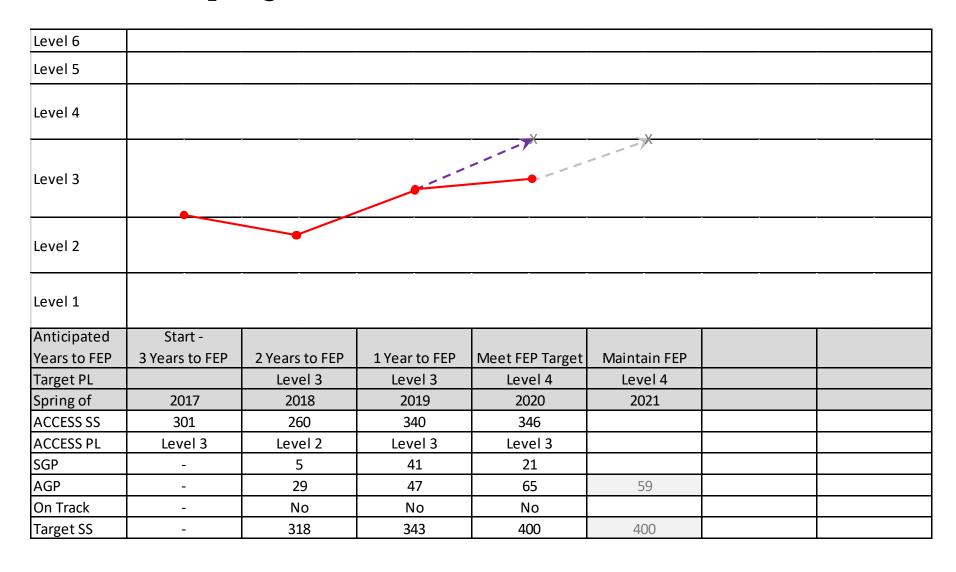
Example Student 3a- first tested at level 3 so shorter AYFEP, less progress so went off track



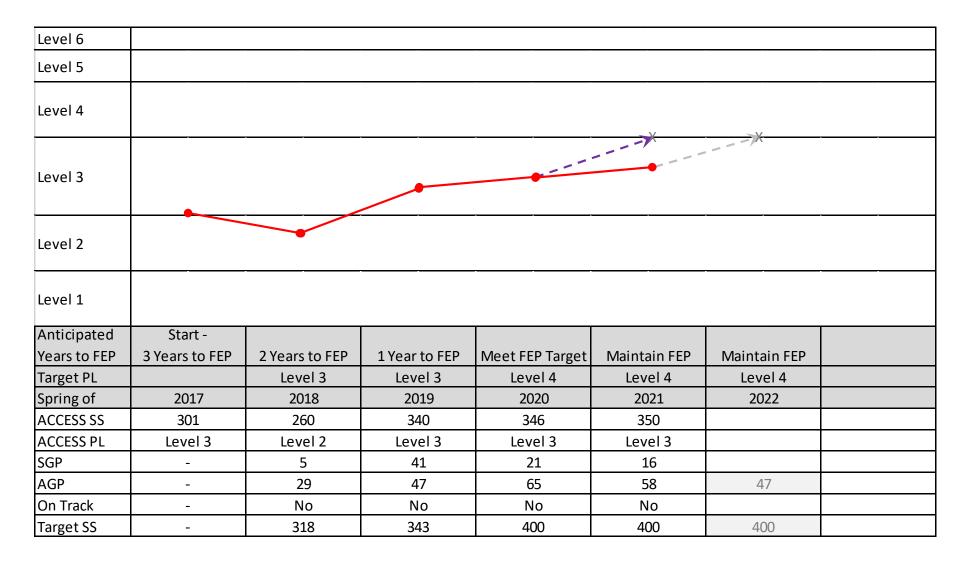
Example Student 3b- first tested at level 3 so shorter AYFEP, less progress so went off track



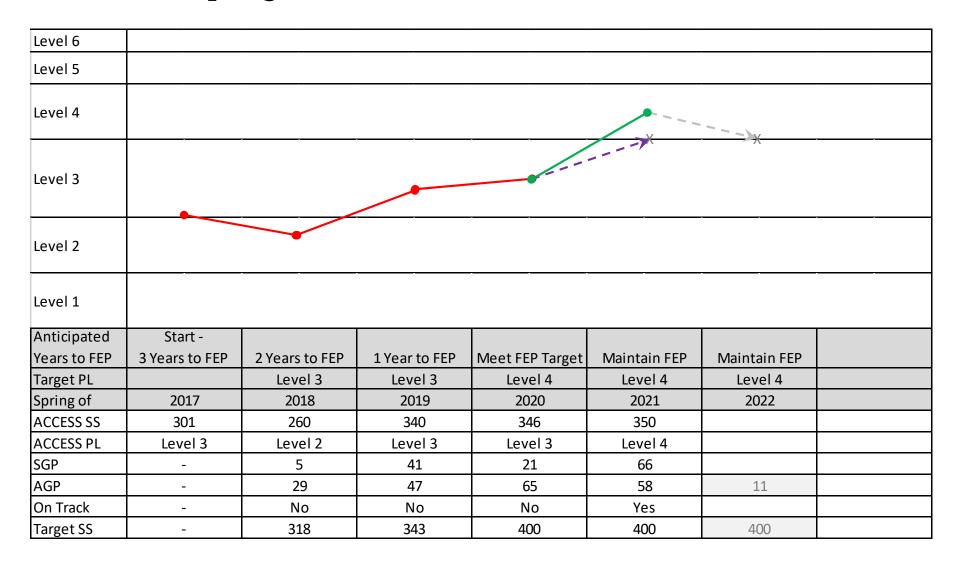
Example Student 3c- first tested at level 3 so shorter AYFEP, less progress so went off track



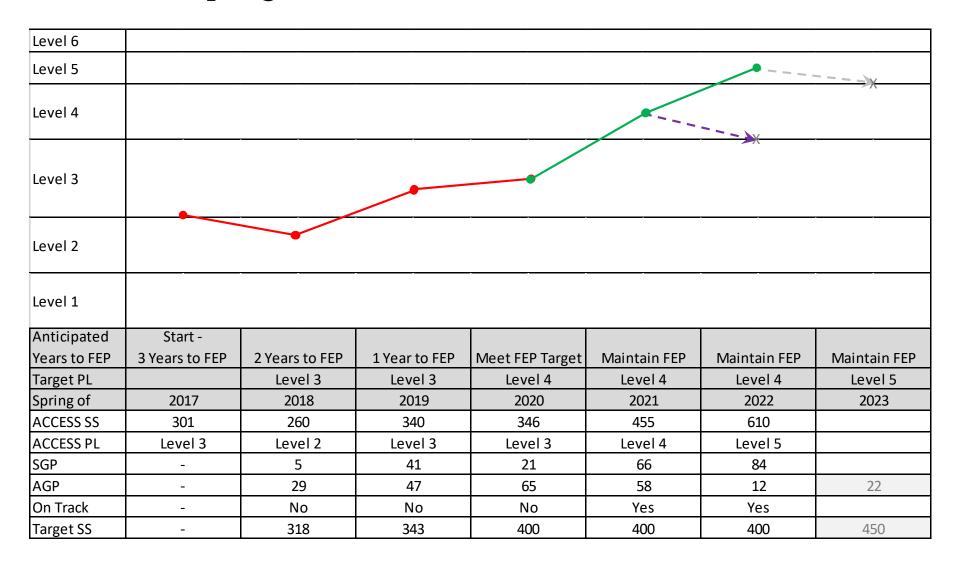
Example Student 3d- first tested at level 3 so shorter AYFEP, less progress so went off track



Example Student 3e- first tested at level 3 so shorter AYFEP, less progress so went off track



Example Student 3f- first tested at level 3 so shorter AYFEP, less progress so went off track



Example Student 7a- newcomer in current year first tested at level 3 so shorter AYFEP, no current year projection, but do get future year projection

Level 6													
Level 5													
Level 4				×									
Level 3	•	•											
Level 2													
Level 1													
Anticipated	Start -												
Years to FEP	3 Years to FEP**	2 Years to FEP	1 Year to FEP	Meet FEP Target									
Target PL		Level 3	Level 3	Level 4									
Spring of	2020												
ACCESS SS	312												
ACCESS PL	Level 3												
SGP	-												
AGP	-	36											
On Track	-												
Target SS	-	357											

Feedback Requested from TAP



- Use Green for observed On Track growth and Red for observed Off Track growth?
- What color should the prior to current year target trajectory arrow be?
- What color should the future year target trajectory arrow be?
- Should we limit the future year target trajectory to 1 year or extend out however long it takes to meet the target?
 Consequence of including further out targets is that they won't match year to year.
- Should we show the next target destination with an X? some other symbol? Should we show the already-achieved target destinations?



Feedback Requested from TAP



- Is it useful to have the full information in the accompanying table? Should we try to include all the info in the graphic?
- Is it confusing to include the future year target growth percentiles in the table in gray? Better way to format?
- How will districts respond if last year's future year target does not quite align with this year's prior to current target?
- Other thoughts?





High School On-Track Growth Marie Huchton



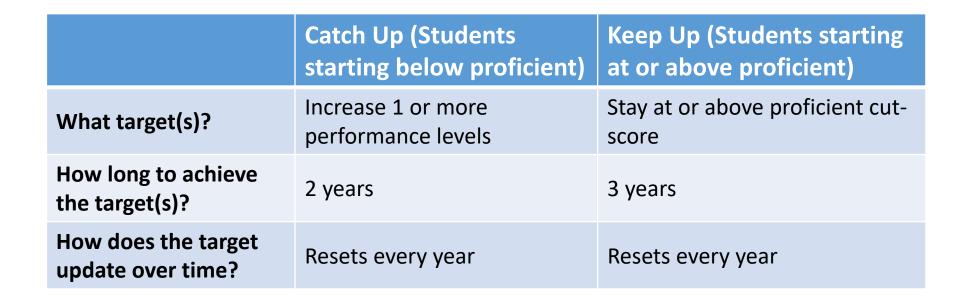


On Track Growth (a.k.a. Growth to Standard) Requirement in SB18-1355

- Required performance indicator for inclusion in annually-determined school and district rating calculations: "Student academic growth to standards, based on students progress toward meeting the state standards... or for students who meet grade-level expectations on the state standards, progress toward higher levels of achievement, if available, as measured by the statewide assessments." 22-11-204(1)(a)(III)
- CMAS g3-8 On Track Growth metric approved by SBE last fall.
- Need to develop On Track Growth metric for PSAT/SAT grades 9-12.



Re-cap of SBE-Approved CMAS g3-8 On Track Growth Metric



 The State Board approved the majority of TAP's methodological recommendations, however did vote to shorten the timeline for students starting below proficient to increase one or more performance levels, from 3 years to 2 years.



Influencing Factors for High School On Track Growth Metric Development and Use

- Establishment of Colorado PSAT/SAT Student Achievement Levels.
 - Standard setting was held mid-January to develop recommended EBRW and Math cut-scores for the g11 SAT (3 cut-scores leading to four achievement levels).
 - SAT cut scores along with back-mapped PSAT10 and PSAT9 cut scores approved by the State Board in March and April.
 - Historical data with back-mapped achievement levels will be used to build our models for analyzing data for On Track growth.



Approved PSAT and SAT Cut-scores

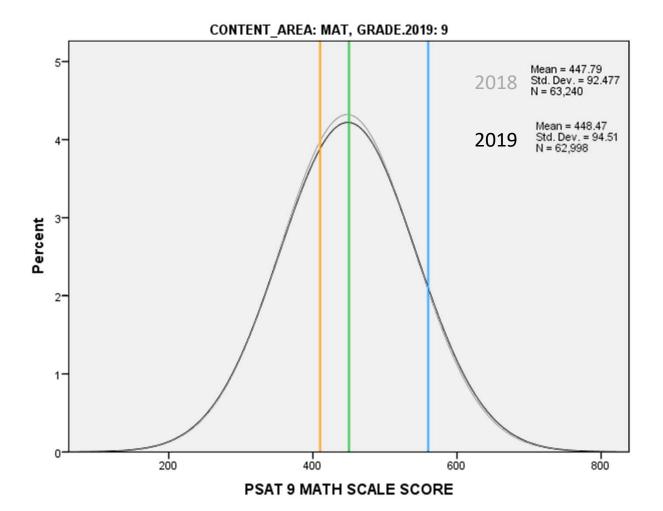


Evidence- Based Reading and Writing	Level 1 Did Not Yet Meet Expectations	Level 2 Approached Expectations	Level 3 Met Expectations	Level 4 Exceeded Expectations
SAT g11	200-430	440-470	480-630	640-800
PSAT g10	160-380	390-420	430-590	600-760
PSAT g9	120-360	370-400	410-560	570-720

Math	Level 1 Did Not Yet Meet Expectations	Level 2 Approached Expectations	Level 3 Met Expectations	Level 4 Exceeded Expectations
SAT g11	200-450	460-520	530-650	660-800
PSAT 10	160-420	430-470	480-580	590-760
PSAT g9	120-400	410-440	450-550	560-720

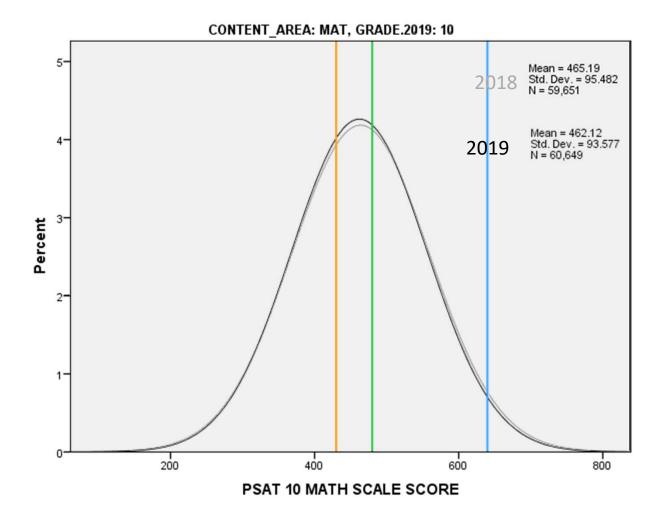


2018 and 2019 PSAT g9 Math Scale Score Distributions with New Cut-scores Applied



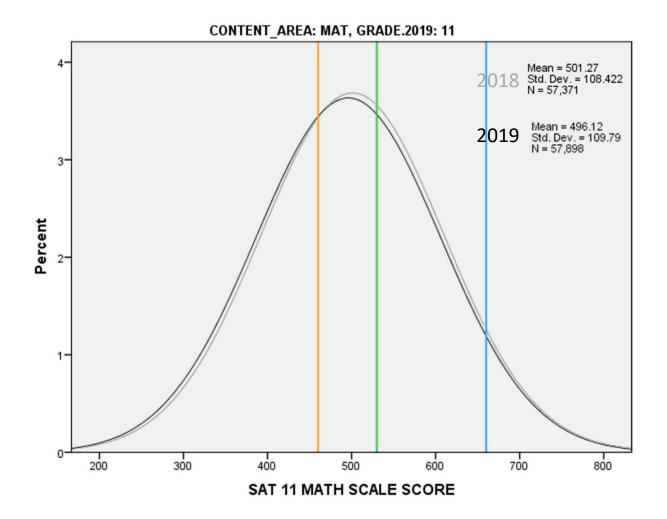


2018 and 2019 PSAT g10 Math Scale Score Distributions with New Cut-scores Applied





2018 and 2019 SAT g11 Math Scale Score Distributions with New Cut-scores Applied





Current Data and On Track Analysis Plans

2016	2017	2018	2019
CMAS g9	CMAS g9	PSAT g9	PSAT g9
PSAT g10	PSAT g10	PSAT g10	PSAT g10
ACT g11	SAT g11	SAT g11	SAT g11

As of 2019, we have not yet had a single cohort of students take the entire PSAT/SAT sequence, so trajectory-over-time information is only available for one year.

We can still calculate target growth percentiles and On Track Growth using a daisy-chaining approach across grades-- 9th to 10th then 10th to 11th



High School On Track Decision Points



Same questions we started with for CMAS g3-8



What target(s)?

- Catch Up- Increase one or more proficiency levels
- Keep Up- Maintain Level 4 proficiency or higher

Progress

How long to achieve the target(s)?

- How many years should students be given to attain their target performance level?
- How does the target update over time?
 - Does the clock start over every year or should this be a set trajectory where we track student progress from the first test result?
- How do we report?
 - Do we report students below proficient (Catch Up) and above proficient (Keep Up) separately? Or combined?



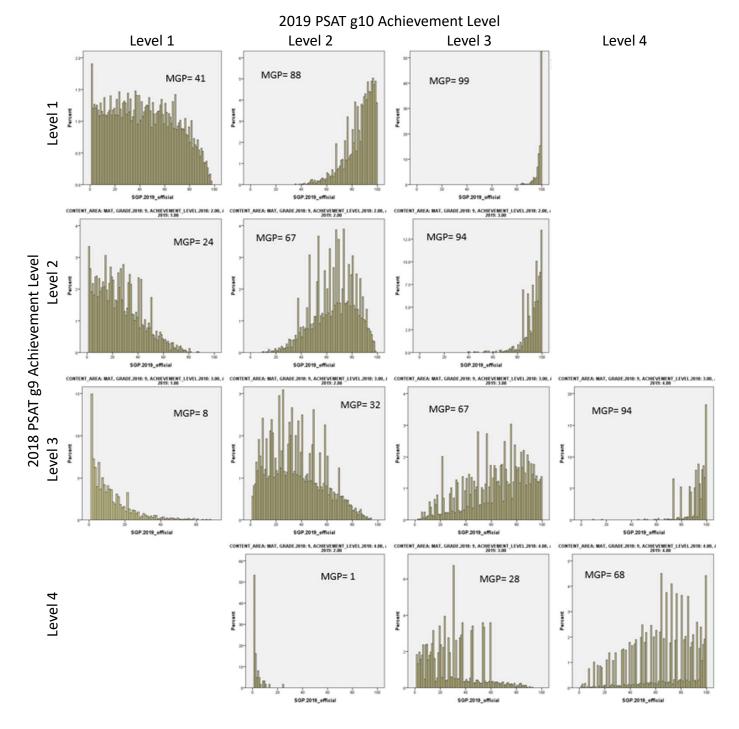
Focusing on Math and Growth calculations using CMAS Priors



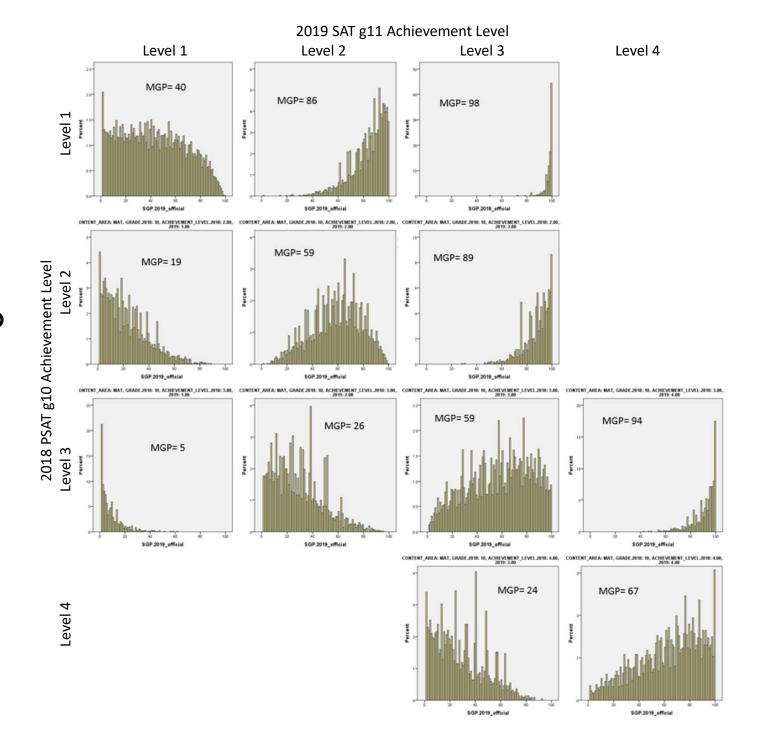
- In working with NCIEA to run the new high school lagged targets, we started with the most complicated scenario, which was linking together CMAS and PSAT/SAT.
- For this reason, the analyses presented today focus only on PSAT/SAT Math growth percentiles and targets calculated using CMAS prior scores
- Future analyses will focus on standalone 9-11 EBRW results and potentially linking CMAS Reading to high school EBRW.



2019 PSAT g10 Math Median Growth Percentile by 2018 to 2019 Achievement Levels



2019 SAT g11 Math Median Growth Percentile by 2018 to 2019 Achievement Levels



Percent of Students by On Track Trajectory and Starting Achievement Level who Are/Are Not On Track Given Differing Timeframes- 2019 PSAT g9 Math

	Content Area	On Trools	2019	Attain	Target in	1 Year (Cu	ırrent)	Attair	n Target V	Vithin 2 Ye	ears	Attain Target Within 3 Years				
Grade		On Track Trajectory		Not On Track		On Track		Not On Track		On Track		Not On Track		On Track		
	7100	riajootory	ent Level	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
			1.00	7878	89.4%			7511	85.2%	367	4.2%	6446	73.1%	1432	16.2%	
		Catch Up-	2.00			670	7.6%			670	7.6%			670	7.6%	
		L1 to L2+	3.00			266	3.0%			266	3.0%			266	3.0%	
			4.00			1	0.0%			1	0.0%			1	0.0%	
			1.00	6144	62.2%			6143	62.2%	1	0.0%	5956	60.3%	188	1.9%	
		Catch Up- L2 to L3+	2.00	2348	23.8%			1831	18.5%	517	5.2%	1350	13.7%	998	10.1%	
			3.00			1380	14.0%			1380	14.0%			1380	14.0%	
			4.00			9	0.1%			9	0.1%			9	0.1%	
9	Math		1.00	2728	24.5%			2728	24.5%			2728	24.5%			
		Keep Up-	2.00	3378	30.3%			3378	30.3%			3378	30.3%			
		L3 to L3+	3.00			4976	44.7%	2162	19.4%	2814	25.3%	2258	20.3%	2718	24.4%	
			4.00			58	0.5%			58	0.5%			58	0.5%	
		Keep Up- L4 to L3+	1.00	306	2.7%			306	2.7%			306	2.7%			
			2.00	1014	8.9%			1014	8.9%			1014	8.9%			
			3.00			8433	73.6%	2719	23.7%	5714	49.9%	4161	36.3%	4272	37.3%	
			4.00			1702	14.9%			1702	14.9%	1	0.0%	1701	14.8%	



Percent of Students by On Track Trajectory and Starting Achievement Level who Are/Are Not On Track Given Differing Timeframes- 2019 PSAT g10 Math

	Content Area	o = .	2019	Attain Target in 1 Year (Current)			Attair	n Target V	Vithin 2 Ye	ars	Attain Target Within 3 Years				
Grade		On Track Trajectory		Not On Track		On Track		Not On Track		On Track		Not On Track		On Track	
	Alca	Trajectory	ent Level	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
			1.00	13461	81.5%			11757	71.2%	1704	10.3%				
		Catch Up-	2.00			2739	16.6%			2739	16.6%				
		L1 to L2+	3.00			311	1.9%			311	1.9%				
			4.00			9	0.1%			9	0.1%				
			1.00	3693	42.1%			3692	42.1%	1	0.0%				
		Catch Up- L2 to L3+	2.00	3943	45.0%			2088	23.8%	1855	21.1%				
			3.00			1124	12.8%			1124	12.8%				
40			4.00			11	0.1%			11	0.1%				
10	Math		1.00	1640	7.7%			1640	7.7%						
		Keep Up-	2.00	6224	29.1%			6224	29.1%						
		L3 to L3+	3.00			12295	57.5%	3376	15.8%	8919	41.7%				
			4.00			1241	5.8%			1241	5.8%				
		Keep Up-	1.00	7	0.1%			7	0.1%						
			2.00	59	0.8%			59	0.8%						
		L4 to L3+	3.00			2762	37.1%	877	11.8%	1885	25.3%				
			4.00			4613	62.0%	9	0.1%	4604	61.9%				

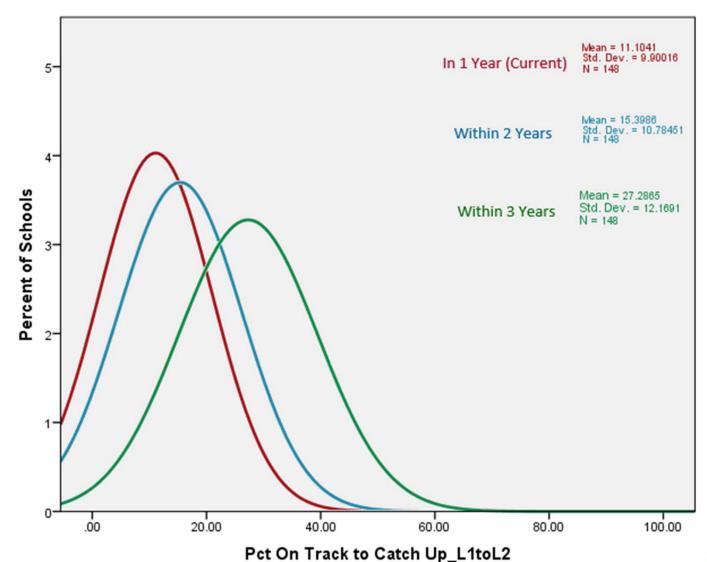


Percent of Students by On Track Trajectory and Starting Achievement Level who Are/Are Not On Track Given Differing Timeframes- 2019 SAT g11 Math

	Content Area	On Track Trajectory	2019	Attain	Target in	1 Year (Cu	ırrent)	Attain Target Within 2 Years				Attain Target Within 3 Years				
Grade			Achievem	Not On Track		On Track		Not On Track		On Track		Not On Track		On Track		
	7100	Trajectory	ent Level	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	
			1.00	13644	79.1%											
11	Math	Catch Up-	2.00			3235	18.7%									
''	IVIALIT	L1 to L2+	3.00			374	2.2%									
			4.00			5	0.0%									
			1.00	3330	33.5%											
11	Math	Catch Up- L2 to L3+	2.00	4898	49.3%											
''			3.00			1703	17.1%									
			4.00			7	0.1%									
			1.00	828	4.6%											
11	Math	Keep Up-	2.00	4236	23.6%											
''	Iviatri	L3 to L3+	3.00			11899	66.2%									
			4.00			1013	5.6%									
			1.00	9	0.1%											
44	Nath	Keep Up-	2.00	23	0.4%											
11	Math	L4 to L3+	3.00			2160	34.6%									
			4.00			4048	64.9%									

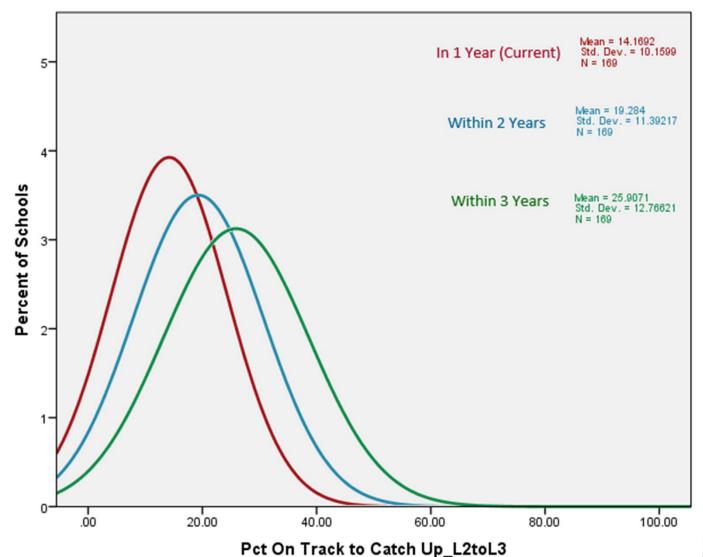


School-level Distributions of % On Track by Timeframe- PSAT g9, Catch Up L1 to L2



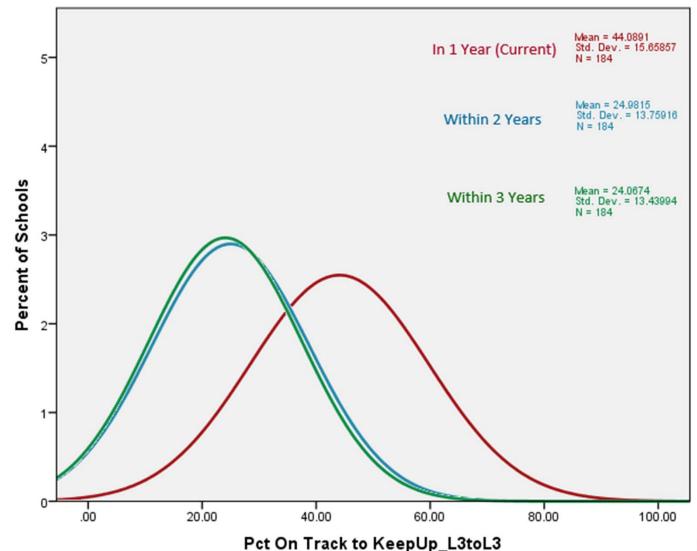


School-level Distributions of % On Track by Timeframe- PSAT g9, Catch Up L2 to L3



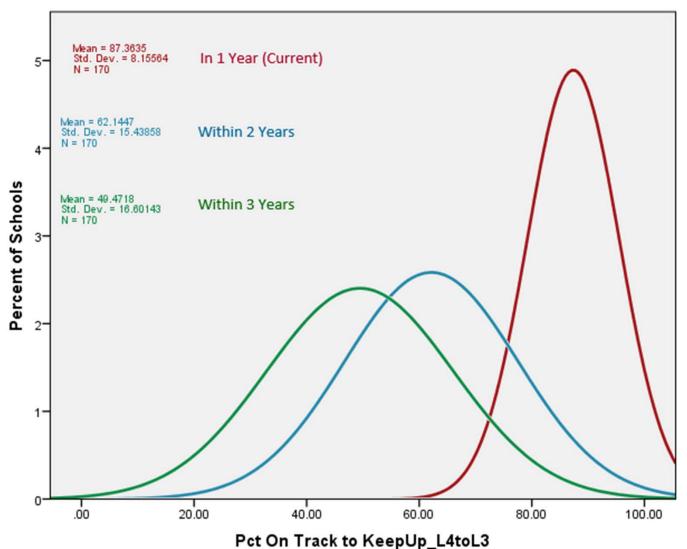


School-level Distributions of % On Track by Timeframe- PSAT g9, Keep Up L3 to L3



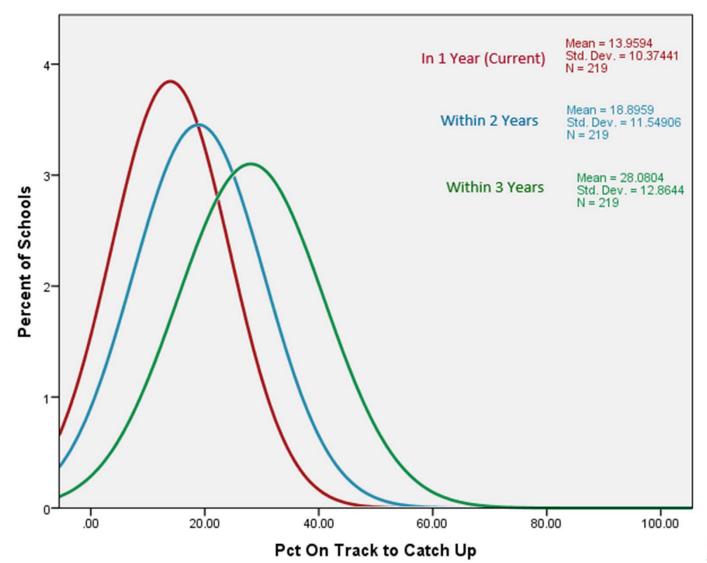


School-level Distributions of % On Track by Timeframe- PSAT g9, Keep Up L4 to L3



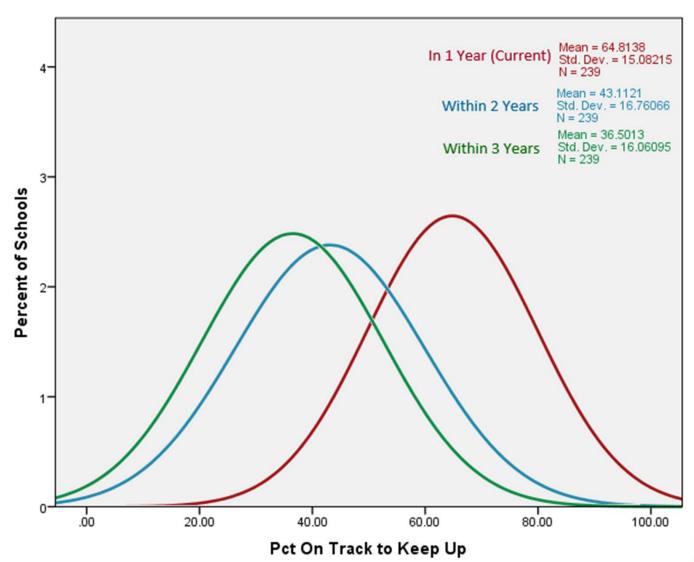


School-level Distributions of % On Track by Timeframe- PSAT g9, Catch Up Combined



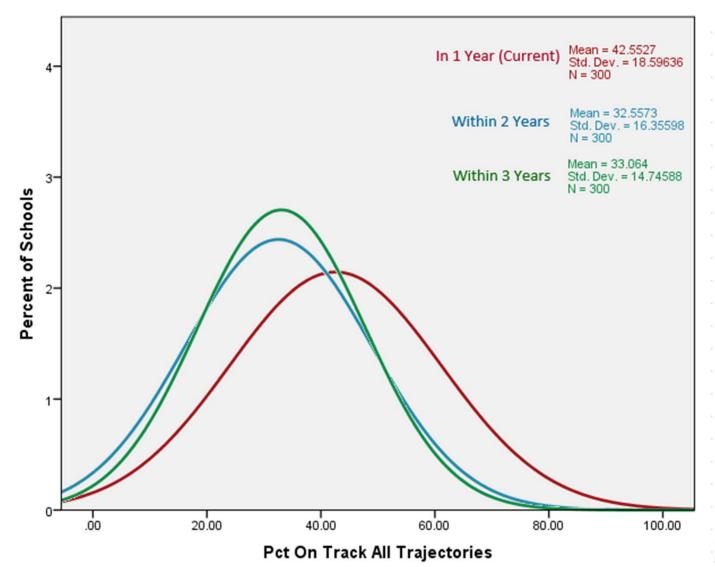


School-level Distributions of % On Track by Timeframe- PSAT g9, Keep Up Combined



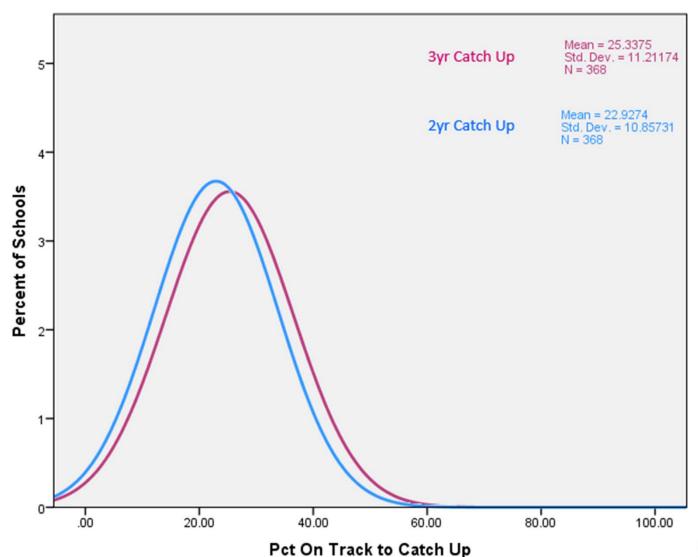


School-level Distributions of % On Track by Timeframe- PSAT g9, All Trajectories Combined



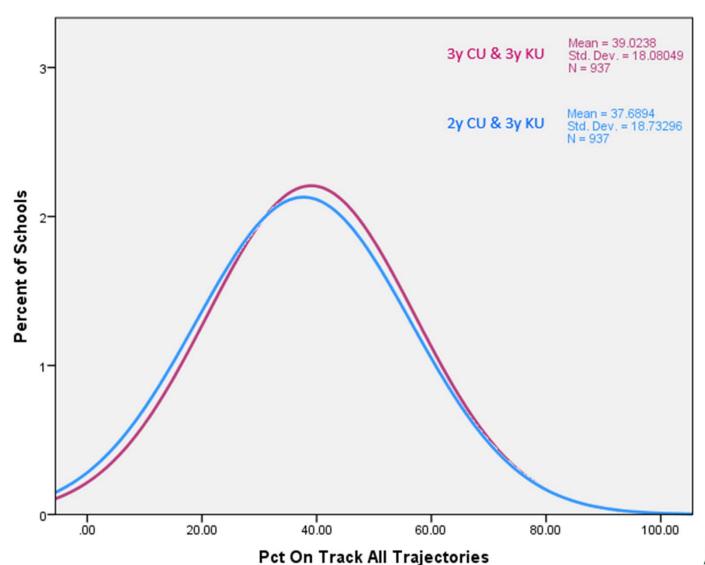


School-level Distributions of % On Track by Timeframe- All Grades and Catch Up Combined



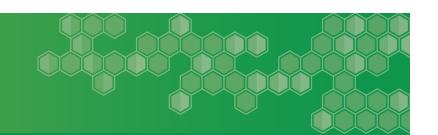


School-level Distributions of % On Track by Timeframe- All Grades and Trajectories Combined





Next Steps



• For July TAP meeting, CDE will continue to build out high school On Track Growth analyses for EBRW (and Math) without CMAS priors.



Upcoming High School On Track Decision Points

- How long to achieve the target(s)?
 - How many years should students be given to attain their target performance level?
 - Assume the same 2 years to Catch Up and 3 years to Keep Up?
- How does the target update over time?
 - Does the clock start over every year or should this be a set trajectory where we track student progress from the first test result?
 - Assume the targets and timelines reset each year?
- How do we report?
 - Do we report students below proficient (Catch Up) and above proficient (Keep Up) separately? Or combined?
 - Indicator weightings on the framework?
 - Assume % On Track Total will be used for framework points and with disaggregations. Separate Catch Up and Keep Up percentages will be published for informational purposes without disaggs?



Technical Advisory Panel



- Meeting Summary:
 - Suggested future analysis
 - TAP recommendations from this meeting
- Public Comment
- Close Meeting
 - Next Scheduled Meeting, Friday, July 17th, 1-4

