DISTRICT OF COLUMBIA
OFFICE OF THE STATE SUPERINTENDENT OF
EDUCATION

Meeting:	**Accountability System:** Median Growth Percentile Growth to Proficiency
Date/Time:	Monday, June 19 12:00 pm - 3:00 pm
Location:	OSSE 810 First St. NE Conference Room 806 Washington, DC 20002
Facilitator(s):	Laura Maurizi and Matthew Jacovina
Notes Posted:	June 30, 2017
Meeting Objective: To provide the deep dive of the Median Growth Percentile and Growth to Proficiency metrics.	

Agenda Items	
I. Median Growth Percentile	Matthew Jacovina
II. Growth to Proficiency	Matthew Jacovina
III. Next Steps/Next Meeting	Matthew Jacovina

Meeting Notes (Q & A and Feedback)

Slide #	Meeting Notes (Q & A and Feedback)
Slide 1: Median Growth Percentile and Growth to Proficiency Metrics	N/A
Slide 2: Goals of Our Discussion	N/A
Slide 3: Opportunities for Feedback and Questions	N/A
Slide 4: Agenda	N/A
Slide 5: Overview of STAR Framework	N/A
Slide 6: Timeline	N/A
Slide 7: Domains and Metrics	N/A
Slide 8: Structure and Weights	N/A
Slide 9: STAR Framework: Elementary Schools/K-8 without Pre-Kindergarten	N/A
Slide 10: STAR Framework: Elementary Schools/K-8 with Pre-Kindergarten	N/A
Slide 11: STAR Framework:	N/A

Middle Schools	
Slide 12: Metric Deep Dive: Median Growth Percentile	N/A
Slide 13: Median Growth Percentile: Overview	N/A
Slide 14: MGP: Calculation	N/A
Slide 15: MGP: Inclusions and Exclusions	N/A
Slide 16: MGP: Hypothetical Point Calculation	**Q:** Why use a one year measurement? Is this etched in stone despite OSSE's report that it fluctuates year-to-year? Traditionally it's true smaller schools can vary from year to year. PARCC MGPs in particular as they have only one year of growth data to go on. **A:** Yes, this is what we would be using for the foreseeable future, but we will be continuing to evaluate this. We will be revisiting calculations like this if they can be improved in the future. For the first informational run, we will be using one year of student growth data, because that is all that we have available to us right now, but we will consider revising that in the future as we get more years of data. **Q:** Do we have capacity to run numbers for last two years? **A:** Not yet as we do not have the final scores of this year's PARCC assessment. The purpose of the dry run is to look at the data together to see if there are any unusual impacts for small schools for example. This is the bulk of the work we will be doing in fall and into next year, and t is intended to look at results more with you, particularly if there is a concern about them. **Q:** The PMF is based on two-year average, so I don't see a reason to deviate from that. The average makes sense. As of now, the PMF is local, and I am concerned about other states leaving the PARCC consortium and what that will cause. I am concerned that the norm group may cease to be comparable. **A:** We will always consider PARCC consortium composition. There have been shifts, so if we continue to use consortium-level data, we will be thoughtful about it. **Q:** For the 2016-17 school year informational dry run, it is suggested do a similar analysis for 2015-16 school year data to see how schools are fluctuating. **A:** We want to make sure there is not a particular grade configuration or school size that ends up fluctuating more than other groups of schools. We will be doing that analysis and monitoring using DC-level SGP vs. consortium level. For example, how many years of data will included in the metric. OSSE feels confident that consortium level is what we want to use, but OSSE will continue to monitor how schools are performing in the dry run and accountability system. **Q:** If the floors and targets are based on 10th and 90th percentile, What happens if every school turns into a school with an MGP of 50? **A:** There is the possibility of convergence, so the other part of yearly review is examining the distribution and frequencies of scores and how metrics are holding up under real-world conditions. Currently, there is a good range of

	scores, but we will be watching and revisiting that if needed. **Q:** What if all results of MGPs are similar? **A:** There is currently a large spread, but if the spread begins to diminish, we may consider setting the floors and/or targets at minimum thresholds. Certainly, we will be examining metric distribution every 3 years when there is an opportunity for growth targets to change, but OSSE will be examining patterns in the data each year. **Q:** Will this go into the business rules? If the distribution begins to diminish, OSSE would need to lower the floor that year. LEAs do not want conversation only to start when this happens. **A:** The floors and targets meeting is on July 12; time at that meeting will focus on this question. **Q:** What does it mean to use PARCC SGPs? **A:** They are the consortium-level SGPs as calculated by Pearson and provided to OSSE. **FEEDBACK:** Please use both years of PARCC data so that we can use with our own LEA level research. LEAs also request that OSSE shares all of the dry runs with LEAs, including using PARCC consortium vs. DC SGPs. One problem over years is that there were not enough students at advanced levels for those to be robust and students to get positive SGPs.
Slide 17: Metric Deep Dive: Growth to Proficiency	N/A
Slide 18: Growth to Proficiency: Overview	N/A
Slide 19: Growth to Proficiency: Overview	N/A
Slide 20: Growth to Proficiency: Options	**Q:** If a student does not make much progress in his/her score changes and then transfers, will the new school be responsible for the student? **A:** Yes for option A. **Q:** Did OSSE look at the likelihood of growth depending on the student's age and grade level? **A:** Yes, by grade but not by age. **Q:** Is Option A independent of a student's first year of at school? For example, if a new student enrolls at a school, but it is the student's 4-year attempt although the school had no hand in their education until to that point, will the new school be responsible for the lack of growth? **A:** Yes, that is one of the cons for option A identified by OSSE. Option A sets ambitious goals for all students in DC, but this situation will only occur when a student is not be making much progress; their growth target would potentially balloon over time. If a student changes schools, this is a potential problem for the new school.
Slide 21: Growth to Proficiency: Exploration	**Q:** Is OSSE starting with performance level instead of scale score bands? If so why? **A:** There are not standard procedures, so OSSE started with performance levels because we believe students should share some similarities. The other problem is as we create smaller and smaller bands, we get fewer students, and it creates larger standard deviations and therefore reliability of

	the growth projections. We hope using performance levels to group students make projected estimates for changes in scale score over time more robust. **Q:** A lot of research says performance levels don't measure anything. Does it matter what scale score the student starts at? **A:** Percentile here refers to a growth percentile. For example, for all grade 5 students starting at performance level 1, we measured their change in scale score and ranked those from highest to lowest and then calculated percentiles. For a 25th percentile student is among that population of 5th graders at performance level 1 from 2014-15 to 2015-16 on PARCC, we observed a decrease in scale score of 8. **Q:** Does it matter what scale score they started at? **A:** When we are creating this universe, it doesn't matter what their scale score is within that bucket. If we had many years of data, we could look and see a more robust way to do this. But since we didn't, we started with this. **Q:** Did you consider splitting performance level 1? Was it more about the number of students in each level? **A:** We tried different ways. We did not split performance level 1 into two groups because of how the PARCC test is created and described by PARCC; it is true that a larger range of scale scores fall under performance level 1 than performance level 2 and 3. Creating an arbitrary cutoff in performance level 1 is not methodologically sound. OSSE would like to find a way to provide more nuanced analysis with more data in future years; we have to keep in mind this is an exploratory analysis **Q:** Where we do not have data, we have to think about what this means for schools. This feels scary given potential consequences. **A:** In the state plan, we say we are going to give three years for students to reach proficiency. This seems potentially harsh for students starting at performance level 1. The purpose of this exploratory analysis is to determine if the three year time frame for growth to proficiency for all students is reasonable; what we found is that the 3 year time frame is challenging for students at lower performance levels. What we do with that is what we want to have the discussion about today. Analysis was to be responsive to the concern over the ambitious three year goal, particularly for students at performance levels 1 and 2.
Slide 22: Growth to Proficiency: Exploration	**Q:** Are these growth percentiles (25th) based on the methods described on the previous slide? **A:** Yes. It is not looking at particular scale scores. It is combining scale scores together by performance level. **Q:** Are those growth percentiles? **A:** Yes. We're calculating growth percentiles based on performance level, not on scale score. It is not that nuanced. It is lumping performance levels together.
Slide 23: Growth to Proficiency: Exploration	**Q:** Is this based on DC population? What is n size? **A:** Yes. I think it's around 5,000 per grade. **Q:** Did you re-run for each starting grade? **A:** All that gets plugged in are starting points. We ran different permutations. Starting with 3rd grader shows trajectory across time. We could do it starting at 5th grade, but we're already showing a lot of data.

	FEEDBACK: You get weird things when starting with scale scores rather than performance level. To develop this kind of model you need a lot more data points. Currently there are not enough. **OSSE RESPONSE:** This is not to establish a numerical expected growth value but to give a sense of how many years it might be reasonable for a student to reach proficiency. **FEEDBACK:** PARCC is not the right assessment for this kind of analysis. It is not large enough, and it is just once a year. It's also only been around for three years. We are deciding school funding, school openings and closings. SGP will get us similarly to this point. This feels invalid. **RESPONSE:** At the first meeting, we talked about what is and is not in plan. Criterion referenced growth measure is required. What would be a more reasonable measure? **FEEDBACK:** There was a commitment by OSSE to send this out in advance, so not having those materials does us a disservice. **RESPONSE:** OSSE understands the frustration and will extend the comment period. **Q:** Did you run different grades? **A:** No.
Slide 24: Growth to Proficiency: Exploration	N/A
Slide 25: Growth to Proficiency: Option A	**Q:** Is this a linear growth model? **A:** Yes, unless if you exceed your growth target, then it might decrease. There may be a minimum you have to make each year, which is lower than the typical growth target. **Q:** What if you hit 750? **A:** If a student hits the target, then there would potentially be some minimum number of scale score points the student should increase each year after that. For example, it could be five or eight points you have to make next year, which is lower than typical of when you move across performance levels. **Q:** What if a student comes into DC in 7th grade? **A:** It is still a 5 year plan, even though 5 years means 12th grade. **FEEDBACK:** Growth is not linear, so growth targets should not be linear, especially if you start at different points. **RESPONSE:** What was described in state plan is straight three years. You take where you want to end up 750, subtract previous years score, divide by three and that is your target. By going through these options, we want to think about how we can make that growth target more realistic using a different methodology. To us, the big problem of three years to proficiency is that it does a disservice to students starting at performance level 1. Within the parameters of state plan, how do we make that better for a larger number of students. **Q:** Floors and targets - why is it three years or five years and not by the time it takes to get to 10th grade? This is the end point. **A:** That would make it harsher. College and career ready should be by year

	16 or 17. **Q:** Is the floor and target based on 10th and 90th percentile? **A:** Yes, it is difficult to measure with a small set of data, but we are bound to this, and we are looking for a compromise. **Q:** Can do another session to get more feedback on this? **A**: Yes. **FEEDBACK:** Please make an unidentifiable data set available to LEAs.
Slide 26: Growth to Proficiency: Option A	**FEEDBACK**: States are working through similar issues, so OSSE will take that into consideration. **Q:** For students who skip or get retained, how are remaining levels of schooling or grade levels affected in the measurement? **A:** They are set based on initial year's performance level. **Q:** Are general education and students with disabilities are on the same model? **A:** Yes. **Q:** This could disadvantage a school receiving a new student who had no growth for first three years, and now it is astronomical growth for final two years. How is this handled? **A:** This is similar to ACCESS growth model. For purposes of PARCC, our hybrid option will address that by restarting the number of years every year regardless of how long you've been taking PARCC. **Q:** What happens if you have a 7th grader who is taking Algebra 1 exam? Would the target still be based on 6th grade basic math? **A:** This is inclusion/exclusion sort of question. We would love to hear feedback on this. The initial thought is for high school exams that student would be excluded because they are taking test outside of middle school. The other issue is grade repeaters and whether they should take the same test and still have same number of years to proficiency.
Slide 27: Growth to Proficiency: Option A	N/A
Slide 28: Growth to Proficiency: Option A	N/A
Slide 29: Growth to Proficiency: Option B	N/A
Slide 30: Growth to Proficiency: Option B	**Q:** Can you redefine the number of years of growth to performance level 4 and recalculate growth target each year and for each student? **A:** Yes, in some ways that is the Hybrid option.
Slide 31: Growth to Proficiency: Option B	N/A
Slide 32: Growth to Proficiency: Option B	N/A
Slide 33: Growth to Proficiency: Hybrid Option	**Q:** Was using prior years PARCC scale score considered, and have it reset each year? **A:** This is still within performance level

	Q: Does 5-year continue to be included in the denominator? **A:** Yes and these students may continue to miss their growth targets as well. **Q:** Did we consider using PARCC scale score and doing more like option A? **A:** Anywhere within performance level 1, you would have 5 years to proficiency. **Q:** There is tension in setting a goal that is reasonable and as students get closer to graduation, you have to accelerate them. **A:** Yes that is a challenge. If OSSE had a more robust model with more individual student information, we could customize more to individual student. OSSE does not have the data necessary. **Q:** If year one I get 650 and year two I get 655. Do my total years of growth remain 5 years? If possible, I am always at performance level 1 and trajectory is 5 years. **A:** You will still miss your growth target. Five years is still the denominator, and they have been missing targets.
Slide 34: Growth to Proficiency: Hybrid Option	**Q:** Growth takes multiple years, and you see steep increases then a plateau. Did OSSE look at more than one year of data to try to account for these options? **A**: Yes, for option A, but the idea is that if they have one year of big growth, the students would follow with a year of less growth in year two. This is not the norm for students across PARCC consortium let alone any school in DC.
Slide 35: Growth to Proficiency: Hybrid Option	N/A
Slide 36: Growth to Proficiency: Hybrid Option	**Q:** PARCC 4+ is still a metric. This is already a statistical calculation. **A:** Yes. **Q:** Can they be taken out of the denominator? **A:** That is an option. Should we include them since they are continuing to be 4+? **FEEDBACK:** In the PMF, we saw that when we stopped giving credit for students maintaining, they were dinging them. Sometimes it is just as hard to maintain as to gain.
Slide 37: Growth to Proficiency: Outstanding Decisions	**Q:** If a student is proficient and then drops below proficient the following year, do they still apply? **A:** This still needs to be confirmed, but yes. **Q:** Why not take them out of the denominator since they are proficient? **A:** This student is already 4+. This could penalize schools. **Q:** Is getting a student from a 4 to a 5 not included in the conversation today? **A:** No it is not, and that is difficult to build into this metric, but this is part of why the students might not be removed from the denominator. Removing a level 4 would add those students with progress to both the numerator and the denominator. **Q:** Can they be in numerator and denominator? **A:** Yes, this is possible.

	Q: What is the scale score necessary to move up a performance level? **A:** It is different by grade level.
Slide 38: Questions and Next Steps	**MEETING NOTE(S):** OSSE will communicate a new timeline to give more time for feedback. **Q:** Would this require an amendment to change the criterion? **A:** Yes.
Slide 39: Ways to Stay Engaged	N/A
Feedback via OSSE.ESSA@dc.gov	
Questions/Feedback Received After the Meeting	**FEEDBACK:** LEAs need more time to consider the metric and suggest alternatives. The slide deck and information presented was substantial, and the proposal of an alternative takes time for research and modeling. **FEEDBACK:** Consider waiting for another year of growth data before continuing with this metric. The benefit of running this model with more data outweighs the inconvenience of waiting to know exactly what the metric will be. **FEEDBACK:** Create a dataset that LEAs and advocates can use to run their own models. There are a lot of capable people in our community who can help, but they need data for modeling. **FEEDBACK:** When OSSE does the dry-run, they should do it for 2014-15 and 2015-16. In addition, the dry-run should be run using the proposed metric and a two-year weighted average. **FEEDBACK:** Every effort should be made to align with the PMF, particularly data collection, inclusion and exclusion, and other business rules. **FEEDBACK:** Create a business rule to exclude "0" students; those students who meet the rule for attemptedness, but did not make a good faith effort to take the test. **FEEDBACK:** The growth to proficiency measure does not take into account students' pattern of performance. The measure should be calculated using a projection approach with accounts for a student's past performance. This approach allows for a student's growth target to be individualized, and subgroups of students (such as EL or SWD) can have a target that is personalized. **FEEDBACK:** Once more data is available, we hope a projection model similar to the Colorado Growth Model is considered. We recommend running additional analyses to determine which growth model would be ideal once this year's PARCC data is available. **FEEDBACK:** Treat student who are PARCC repeaters the same as any other student. Their growth targets should be based on their performance levels. **FEEDBACK:** Remove students who are already proficient from the calculation of growth to proficiency.

	FEEDBACK: Options A and B for the Growth to Proficiency metric both have drawbacks that should exclude them from use. The hybrid option is promising. **FEEDBACK:** Share how other states, particularly PARCC states, handle a criterion-referenced growth metric. **FEEDBACK:** The purpose of including growth to proficiency within the framework is to capture academic progress that is not captured by proficiency alone, and including a growth measure that is highly correlated to achievement may not fully capture out intention. **FEEDBACK:** All 3 of the proposed options for growth to proficiency have more aggressive goals for students with lower proficiency levels. We are concerned that this will have a disproportionate negative impact on schools with a high number of students at lower achievement levels. **FEEDBACK:** We recommend developing additional potential versions of the measure. For example, using uniform growth expectations across all proficiency levels may not be correlated with proficiency. This might provide a better opportunity to give schools credit for growing students. **FEEDBACK:** Using a target for growth that feels within reach may spur more growth than targets that seem inaccessible for schools with many students who are multiple years behind. **FEEDBACK:** On MGP, we would like to know what the margin of error is for smaller n-sizes. Also, MGP is known to adversely affect schools that take in lower performing students because it is correlated with proficiency at the school-level. **FEEDBACK:** We would like more substantial research to define "sufficient" growth. Proficiency in 3-5 years was based on a very preliminary analysis, and does not account for the impact of age/grade-level on growth expectations. **FEEDBACK:** We are not opposed to using PARCC consortium-level SGPs, but please be sure to monitor the implementation and use of the PARCC assessment in other states. **FEEDBACK:** We strong suggest implementing a business rule that removes outliers in the growth to proficiency metric when setting floors and targets. **FEEDBACK:** Please share any de-identified data you have regarding the growth to proficiency metric. **FEEDBACK:** Please provide additional insight into how you plan on treating levels 4 and 5 students in the growth to proficiency metric.

Next Steps
1. LEAs can provide feedback within 3 business days (by June 22, 2017) via OSSE.ESSA@dc.gov. 2. Notes will be send out 5 business days after the meeting (by June 26, 2017).

Next Meeting
Thursday, June 29, 2017 2:00 pm – 4:00 pm OSSE 810 First St. NE Conference Room 806 Washington, DC 20002