

Accessing Student Growth Percentiles for Educator Evaluations

A Technical Guide

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10/2/2019 Michigan Department of Education: Accessing Student Growth Percentiles within Educator Evaluations i

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Technical Guidance for Calculating Mean SGP Scores to Determine Student Growth Ratings

Introduction to Technical Guidance

The legislation that governs educator evaluations for teachers and administrators in the State of Michigan (MCL 380.1249) includes requirements that student growth measures be a component of teacher and administrator evaluations. Beginning with the 2019-2020 school year, student growth and assessment data must account for 40% of the annual year-end teacher evaluation. For teachers of grades and content areas measured by state assessment with student growth data available for use, half of the student growth portion (20% of the total evaluation) of evaluations must be determined by state assessment student growth data in 2019-2020. The Michigan Department of Education (MDE) recommends that districts interpret 380.1249(2)(a)(ii) to require student growth from state assessments for teachers of record in subjects ELA or/and math in grades 4 through 8. PSAT/SAT assessment student growth data in grades 9 through 11 may be used within educator evaluations as one of the multiple measures used to determine summative ratings, but are not interpreted as being required for use in calculating ratings. If a teacher is not a teacher of record for ELA or math in grades 4 through 8, beginning with the 2019-20 school year, 40% of the summative evaluation rating is based on assessments using multiple research-based growth measures or alternative assessments that are rigorous and comparable across schools. The selection of those measures are at the discretion of local districts. The Michigan Department of Education (MDE) provides Student Growth Percentiles (SGPs) to Michigan schools as the recommended student growth measure for the state in grades 4 through 8 for subjects ELA and math.

To use SGPs in educator evaluation, evaluators will need to be able to 1) access student-level SGP data from the MDE Secure Site, 2) connect the appropriate SGPs to the educator, and 3) aggregate the relevant student-level growth percentiles into an educator-level score that will be combined with observation and local growth data to inform an educator's final evaluation rating.

This document provides step-by-step instructions on how to access and calculate a mean SGP¹ for each educator to determine the state assessment student growth portion of an educator evaluation using a Microsoft Excel tool developed by the MDE. The MDE SGP Educator Evaluation Calculator Tool largely automates the processes for aggregating student SGPs for teachers and/or administrators. This tool includes the policy and business rule recommendations for using student growth percentiles to determine state assessment student growth. Districts and PSAs with access to data warehouses or other reporting tools may find ways to automate these processes and further limit the burden of calculating educator-level mean SGPs.

¹ The Michigan Department of Education recommends the use of mean student growth percentiles as the preferred aggregation method for educator evaluations. Some previous MDE documents included the recommendation to use median student growth percentiles. While using the median is acceptable, the MDE guidance has shifted to reflect current research, the guidance of our Technical Advisory Committee, and a national shift toward the use of mean student growth percentiles.

We hope that school and district leaders find this document to be a useful resource as they prepare to incorporate state growth measures into teacher and administrator evaluations as they become required by law. The technical guidance will describe the following procedures:

- <u>Calculating SGP Scores for Schools and School Grade Levels</u>
- Downloading SGP Scores from the Michigan Department of Education Secure Site
- Instructions for Using the MDE SGP Educator Evaluation Calculator Tool

Principal and Superintendent Evaluation: Accessing Mean SGP Scores for Schools and Districts

The Michigan Department of Education began publicly reporting SGP data for both school districts and buildings during the 2016-2017 school year within the <u>http://www.mischooldata.org</u> web site. For principals responsible for all instruction in an entire building, or district administrators responsible for instruction in a district, the mean (average) SGP reported on MI School Data may be used as the state growth measure portion of the administrator evaluation. These reports may also be disaggregated by subject and grade-level. Instructions for accessing mean SGP score for school districts and school buildings are provided below.

Accessing Mean SGP Scores from MiSchoolData.org

Step 1: Use a web browser to access this URL:

https://www.mischooldata.org/DistrictSchoolProfiles/AssessmentResults/StudentGrowth/StudentGrowth.aspx

Step 2: Select the ISD, district, school, school year, grade level (or all grades), subject area, and choose student population within the *Report Category* pulldown. A subject area must be selected, so if you would like to obtain all of the means for SGPs at a district, school, or grade level, you must run separate reports for each subject area and use a method to combine the averages for each subject area.

Student Growth Students Not Tested Top 30 / Bottom 30 Anal	ysis
Edit Report	About This Report
Find Location	
Selected Location Statewide	🗘 Keyword Search
ISD All ISDs in State	Reset to Statewide
Districe I All Districts in State	
School All Schools in State	
Add Comparison Location	ISD = Intermediate School District
Report Settings	
School Year 2015-16	
Grade Please select an item	×
Subject	
Report Category	

Step 3: The report that is generated will provide the number of students and percent of students in three different categories: Above Average Growth, Average Growth, and Below Average Growth. To view the mean SGP for each report, you will need to scroll the scroll bar below the data under the graph to the right. The mean SGP score for each report will be provided under mean SGP.



Instructions for Using the MDE SGP Educator Evaluation Calculator Tool

The MDE SGP Educator Evaluation Calculator Tool is designed to automate calculations consistent with the policies recommended² by the Michigan Department of Education, and the use of this tool is recommended to determine state assessment data to determine student growth ratings for educator evaluations by using growth data that may be attributable to individual educators. Districts are also encouraged to investigate the use of data warehouses and data management systems to replicate the calculations and reporting found within the MDE SGP Educator Evaluation Calculator Tool. The MDE SGP Educator Evaluation Calculator Tool may be downloaded from the MDE student growth percentile website that may be found here: http://www.michigan.gov/mde/0,4615,7-140-5683_75438_78528-399514--,00.html.

Step 1: Download the *MDE SGP Educator Evaluation Calculator Tool - No Example Data* from http://www.michigan.gov/documents/mde/MDE_SGP_Educator_Evaluation_Calculator_Tool-Clean_576671_7.xlsx, open the MDE SGP Calculator Tool file, and click on the tab for the sheet titled CopyCurrentMSTEPBAAFileHere.

SGPCalculations2	PriorYe	ars Copy	CurrentMS	TEPBAAFil	eHere	CopyCurre	ntMIAccess	BAAFileHer	e	
									▦	

Step 2: Open a web browser to go to the MDE Secure Site. Log in and click on the *Reports* menu item at the top of the site and then click on Student Test Scores. Leave the SGP calculator tool open but in the background.



² Instructions were initially developed for the download of SGP data and manual calculation of SGP scores to determine student growth ratings. Those instructions included over 76 steps to determine a rating score. The MDE SGP Educator Evaluation Calculator Tool helps ensure adherence to policy recommendations while greatly decreasing the time required to use SGP scores to determine student growth ratings.

Step 3: Click the pull-down menu under **Test Cycle** that says *Select a Test Cycle* and then choose the most recent state assessment information you would like to download (M-STEP, MI-Access, or PSAT 8).



Step 4: Click on the pull-down menu under **Report Type** titled *Select a Report Type* and then click on **Student Data File**.



Step 5: Choose either All grades or select the grade or grades providing data for the students for whom the teacher or administrator is responsible (grades 4-8).



Step 6: Select the ISD, district, and school, and then click on the Search button. The selection of District Summary Report for school selection is recommended for districts who would like to create a template report for the entire district. This will reduce workload by allowing districts to only need to follow steps 1 through 13 in these directions once for the whole district and then saving the file as a template to use for all educators.



Step 7: Either open the file or save it to a file location you will be able to easily find and then open. The raw data file is in .csv format that may be opened by Microsoft Excel, or other spreadsheet programs. The headers for the columns in the first row will provide you with labels for the data contained within each column.

2	7.	csv fror	n baa.st	tate.mi.	us?					<u>O</u> pen		S			
Ī	4	A	В	С	D	E	F	G	н	I	J	K	L	М	N
	1	TestCycle	ISDCode	DistrictCo	SchoolCo	FeederSc	Grade	LastNam	e FirstNam	e MiddleIni	Gender	Ethnicity	UIC	Student	BirthDate
	2	-		1000				4						-	
	3							4						-	
	4		1.000					4						-	-
L	5			1000				4						-	-
	6							4			10 C			-	-
	7							4						-	-
	8							4						-	-
	9		1.000					4						-	-

Step 8: Select all of the data by clicking on the arrow above row 1 and to the left of column A (or you may simultaneously press your control and A keys on your keyboard) to select all of the spreadsheet cells.



Step 9: Hold down your Ctrl key on your keypad and then press the C key to copy the contents of the entire spreadsheet. Alternatively, you may also right click any of the selected cells (all cells should be selected within step 8) and then click on copy.

	Α	В		С	D	E	F	G	н	I	J
1	TestCycle	ISDCode	ICDI	lama	DistrictCo	DistrictN	SchoolCor	SchoolNar	Grade	Subject	SubGroup
2	Spring 201		Cali	bri ·	- 11 - A	A \$ -	% , 🛱				
3	Spring 201		В	I	🗏 - <mark>८</mark> =		.00 💉				
4	Spring 201						1				
5	Spring 201		X	Cut		-					
6	Spring 201		PB.	Cont							
7	Spring 201		4	Part	Ontioner		2 100				
8	Spring 201		0	T dStd	e options.						
9	Spring 201			3			2				
10	Spring 201			Paste	Special						
11	Spring 201			Inser	+		<u></u>				
12	Spring 201			p. L.							
13	Spring 201			Delet	e		<u></u>				
14	Spring 201			Clear	Contents						
15	Spring 201		* 0	Form	nat Cells		-				
16	Spring 201		_	Row	Height		_				
17	Spring 201			Hide	-		-				
18	Spring 201			Tide			_				
19	Spring 201			Unhi	de						
20	Spring 201						_				
21	Spring 201										
22	Spring 201						_				
23	Spring 201	Concession in the local division in the loca		-			C. Contra				CONTRACTOR OF STREET,

Step 10: Bring the SGP tool to the foreground by clicking on it in your Windows Taskbar or by toggling to it by holding down your Alt key and typing the Tab key. The currently empty

CopyCurrentMSTEPBAAFileHere sheet should be displayed. Click on either the A1 or on the arrow above row 1 and to the left of column A. Right click on cell A1 and click Paste (you may also hold down your Ctrl key and type the P key). The entire contents of the state assessment raw data file cell will be pasted into the CopyCurrentMSTEPBAAFileHere sheet. Using paste values option (see below for an example) rather than the default paste is recommended because paste values may reduce the possibility of inconsistent formatting from differing programs causing issues with calculations.



Step 11: Click on the CopyCurrentMIAccessBAAFileHere sheet tab and repeat steps 2-10, this time selecting the MI-Access assessment rather than the M-STEP assessment.

	Spring 2016 SAT
	Spring 2016 M-STEP
	Spring 2016 MI-Access
CopyCurrentMSTEPBAAFileHere CopyCurrentMIAccessBAAFileHere CopyPriorYearMSTEPBAAFileHere	Spring 2016 WorkKeys WorkKeys

Step 12: If the school or district provides instruction to 8th grade students, click on the CopyCurrentPSAT8FileHere sheet tab and repeat steps 2-10, this time selecting the PSAT 8 assessment.



Step 13: Click on the CopyPriorYearMSTEPBAAFileHere and CopyPriorYearMIAccessBAAFile sheet tabs and repeat steps 2-11 for both M-STEP and MI-Access, this time selecting the state assessments for the year previous to the most current.

		Spring 2015 College and Career Ready ACT
		Cycle I Aug-Dec (2014) W-APT W-APT
		Spring 2015 M-STEP
		Spring 2015 MI-Access
CopyCurrentMIAccessBAAFileHere	CopyPriorYearMSTEPBAAFileHere CopyPriorYearMIAccessBAAFile	Cycle Pre-K Apr-Aug (2014) W-APT
		W-APT

Step 14: Click on the Copy2YearPriorMSTEPBAAFileHere and Copy2YearPriorMIAccessBAAFileHere sheet tab and repeat steps 2-11 for both M-STEP and MI-Access, this time selecting the state assessments for the school year two years previous to the most current. At this point, districts and schools are encouraged to save the file to a known file location to create a template for all educators included within the data files created within steps 6 and 7, eliminating the need to follow steps 1-14 more than once.

		Spring 2013 MME
CopyCurrentMIAccessBAAFileHere	CopyPriorYearMSTEPBAAFileHere CopyPriorYearMIAccessBAAFile	opring 2013 MI-Access
copy carrenting tecessor of inertere	Copinion complete solution	Spring 2013 ELPA ELPA

Step 15: Generate roster reports using the district student information system (SIS) including student names and UICs for all students for whom the teacher was the teacher of record in the subjects of ELA and math in grades 4-8.

Step 16: Click on the SGPCalculationsMostCurrentYear sheet tab in the SGP calculator tool.

	-			-	-	
	-			-	-	
Instru	uctions	SGPCalcu	lationsMostCur	rentYear	3 Year F	Recency Weigting
			7			

Step 17: Type in or copy and paste the UICs from the district or PSA student information system (SIS) assigned to the teacher for the most recent school year with available state assessment data. All students' UICs should be included for whom the teacher was the teacher of record in ELA or math subjects for grades 4-8 starting in cell C6.



Step 18: Type in the teacher's name and grade levels they teach: ELA and/or math. Click the pull down to select the school year with the most current state assessment and SGP data available. Click the pulldown selecting whether the teacher is the teacher of record for ELA, math, or both for that school year.

Three Year Aver	rage SGP Calcula	tion Tool	Grades(s)	Most Current School Year with SGP Data	
Teacher Name:	Joe Sm	ith]	>	4-5	MICHIGAN 2015-2016
Student Last Name	Student First Name	UIC	ELA SGP	Math SGP	Education Subject Areas Taught
-	-		-	-	ELA and Math
-	-		-	-	U U
-	-		-	-	Select SGP Metric for Rating Score
-	-		-	-	2-3 Year Average Weighted by Recency
-	-		-	-	
-	-		-	-	2015-2016 Average SGP

Step 19: Click on the SGPCalculationsPriorYear sheet tab in the SGP calculator tool.



Step 20: Type in or copy and paste the UICs assigned to the teacher the school year previous to the most recent year of available state assessment data. All students' UICs should be included for whom the teacher was the teacher of record in ELA or math for grades 4-8 starting in cell C6. Click the pull down under Subject Area Taught to select whether the teacher was the teacher of record for ELA, math, or both.

Student Firstname	JSR.		ELA SGP	Math SGP	
Firstname1386	1386		87	90	Subject Areas Taught
Firstname1388	1388		22	84	ELA and Math
Firstname1390	1390		52	40	
Firstname1419	1419		85	24	
Firstname1397	1397	Г	51	42	2013-2014 Average SGP Score
Firstname1401	1401	T	18	20	# of SGPs 40.2
Firstname1444	1444	г	30	86	43 40.5
Firstname1440	1440	Т	58	9	
Firstname1434	1434	Т	35	37	
Firstname1435	1435	Т	74	91	Average ELA SGP
Firstname1441	1441	Т	37	47	# of SGPs 47.0
Firstname1422	1422	Т	9	18	21 47.0
Firstname1418	1418	T	18	52	· · · · · · · · · · · · · · · · · · ·
Firstname1410	1410	T	59	16	1
Firstname1392	1392	Т	87	71	Average Math SGP
Firstname1411	1411	Г	53	41	# of SGPs 40 F
Firstname1415	1415	Г	16	30	22 49.5
Firstname1420	1420		55	80	
Firstname1455	1455		-	3	
Firstname1446	1446		72	49	
Firstname1444	444	¢.	30	86	

Step 21: Click on the SGPCalculations2PriorYears sheet tab in the SGP calculator tool.



Step 22: Type in or copy and paste the UICs assigned to the teacher two school years previous to the most recent year of available state assessment data. All students' UICs should be included for whom the teacher was the teacher of record in ELA or math for grades 4-8 starting in cell C6. Click the pull down under Subject Area Taught to select whether the teacher was the teacher of record for ELA, math, or both.



Step 23: Click on the SGPCalculationsMostCurrentYear sheet tab in the SGP calculator tool.



Step 24:

The 1, 2 or 3 year Average SGP score will be automatically calculated, as will the overall SGP Rating Score. The SGP Rating Score is determined by values shown within this sheet, and are set to the MDE recommended 3-year aggregate mean SGP score criteria.

Average SGP Required for State Assessment Growth Rating of Exeeds - 4	60
Average SGP Required for State Assessment Growth Rating of Met - 3	40
Average SGP Required for State Asessment Growth Rating of Nearly Met - 2	20

These values are locked within the tool so they cannot be edited. If your district has reason to change the recommended minimum aggregate mean SGP scores required to determine 1-4 student growth rating scores, you may contact the MDE at <u>MDE-EdEvals@michigan.gov</u> to provide a rationale for receiving a copy of the tool with adjusted values.

OPTIONAL Step 25: The school district may select from three different metrics for use when determining state assessment student growth rating scores. The MDE recommends that the choice between these three metrics is made at the district level, and not building by building or educator by educator.



The default metric that may be selected is 2-3 Year Average Weighted by Recency. This metric allows educators to put greater weight on more recent scores and allows educators who improve their practice to have this improvement better reflected in their growth ratings. This metric also weights the SGP averages for each year by the number of SGPs in each year used to determine the average SGP score.

The weights for recency may be edited by clicking on the 3 Year Recency Weighting sheet tab and editing the numbers under the Desired Weight of Emphasis for 3 Year SGP Score heading. The three numbers under this heading should equal 100%. If the default of 50-30-20 weighting is changed, the decision to determine what recency weighting is used should be made at the district level for consistency and comparability purposes.

	SGP Re	ecency Weig	ghting	
	Weighting fo	or Recency Emphasis		
	School Year	Desired Weight of Emph for 3 Year SGP Score	asis	
Most Recent Year	2015-2016	50% 🗘		
Year Previous to Most Resent	2014-2015	30%		
Two Years Previous to Most Recent	2013-2014	20%		
Totals (should equal 10	0%)	100%		

Another choice in 3-year aggregate mean SGP score metrics is 2-3 year Average with No Recency Weighting. This choice will weight the SGPs by the number of total SGPs in each year included within the 3-year average, and will include no other weighting.

The final mean SGP score metric option is the SGP average score for the most recent year only. This selection should only be made if 20 or more SGP scores were used to determine the most recent year SGP average, and the SGP scores for the previous year or previous 2 years are either not available or for some reason deemed invalid for that teacher.

The MDE recommends using either the 2-3 Year Average Weighted by Recency or 2-3 year Average with No Recency Weighting when these options are available to the educator.

NOTE: The MDE recommends that the three-year mean (average) SGP score used to derive the state assessment student growth rating score include at least 20 SGP scores across the three-year period. If less than 20 SGP scores are available from the last three years of available data, educators may consider the use of multiple research-based growth measures or alternative assessments that are rigorous and comparable across schools to substitute for the state assessment portion of the educator evaluation.

NOTE: This guidance document was updated on October 9, 2019 to provide updated instructions for the inclusion of PSAT 8/9 in 8th grade student growth data.