



Missouri School Accountability: Current and Future Directions for Elementary and Middle Schools

Mel Fenske, Ashley Donaldson Burle, & Meg Gorton



PRIME CENTER
SAINT LOUIS UNIVERSITY

Better evidence, better policies, better schools.

Volume 4, Issue 8
January 2023

Key Points

In this policy brief, we build on our previous brief, Missouri's School Accountability System, and take a deeper dive into two specific components of school accountability systems—school rating systems and accountability indicator weights. We discuss the weight of academic growth within performance indicators at the elementary and middle school level and consider the proposed changes to these areas under SB 341 and HB 558. We add evidence by examining school accountability systems in states with high growth and conclude by providing policy recommendations based on our findings. We find:

1. School accountability systems in states with the highest growth place greater emphasis on achievement status and growth indicators at the elementary and middle levels.
2. In most of the highest-growth states, growth accounts for at least 40% of the overall rating, and growth is weighted more than achievement status.
 - o Some of the highest-growth states include a metric that focuses on the growth of the lowest-performing students.
3. Missouri's current LEA and school report cards lack a summative rating, making standing determinations and differentiation difficult.
4. The proposed legislation would increase the weight of achievement status and growth at the elementary and middle school level from 48% (24% each) to 90% (45% each) in Missouri's school accountability system and emphasize the growth of lower-achieving students.

	Achievement			Growth			Achievement & Growth Metrics as % of
	All Students	Student Groups	Total	All Students	Student Groups	Total	Total Accountability Rating
MSIP 6	16%	8%	24%	16%	8%	24%	48%
SB 341 / HB 558	45%	0%	45%	22.5%	22.5%	45%	90%

Sources: <https://dese.mo.gov/media/pdf/msip-6-comprehensive-guide>; https://www.senate.mo.gov/23info/BTS_Web/Bill.aspx?SessionType=R&BillID=44719; <https://house.mo.gov/Bill.aspx?bill=HB558&year=2023&code=R>



prime@slu.edu



@SLU_PRIME



SLU_PRIME



www.sluprime.org

From Our Previous Brief: Missouri's School Accountability System



In our previous brief, [Missouri's School Accountability System](#),¹ we described Missouri's current accountability system for traditional public and public charter schools—Missouri School Improvement Plan (MSIP) 6—and how it differs from the prior version known as MSIP 5. We detailed federal school accountability system requirements under the Every Student Succeeds Act (ESSA) and assessed the composition of Missouri's current school accountability system.

We found:

1. ESSA largely places the responsibility of designing school accountability systems on individual states, meaning states have significant influence over the standards LEAs and schools are held to and, thereby, the education available to students.
2. The emphasis on performance components, such as academic achievement status and growth, decreases in MSIP 6 (from 100% to 70%) with the addition of the continuous improvement component (30%).
3. The continuous improvement component (30%) focuses on inputs like continuous improvement plans, additional student readiness indicators, student attendance, and reflections on progress towards meeting goals, administering and analyzing the results of a culture and climate survey, as well as timely submission of numerous required documents and data points.
4. In MSIP 6, achievement status and growth are considered independent and equal—each component accounts for 24% of the total score.
5. Missouri has made strides in revising its school accountability system, particularly by separating and strengthening the importance of academic status and growth. However, these performance outcomes, which demonstrate students' comprehension and learning of key subject areas, account for less than half (48%) of a school or district's performance rating.

Introduction

Missouri has seen a historic decline in students' academic performance in recent years. Our [previous findings](#) highlighted the unprecedented declines in Missouri's student performance on NAEP 4th and 8th grade math and reading assessments from 2019 to 2022 and noted 2022 scores were the lowest in decades (Figures 1 and 2).² In addition, we found Missouri has fewer NAEP Proficient or Advanced students than in prior years, lagging behind the majority of other states and the nation, and widening achievement gaps by race and family socioeconomic status (Figure 3). Results on the Missouri Assessment Program (MAP) told a similar story—declines in the percent of students achieving Proficient and Advanced in English Language Arts (ELA) and math between 2019 and 2022 and achievement gaps of 28 to 31 percentage points in ELA and math respectively.³ Such declines throughout the state raise the question of whether Missouri is effectively holding schools accountable.

Figure 1 : 4th Grade NAEP Scores, Missouri and US, 2022

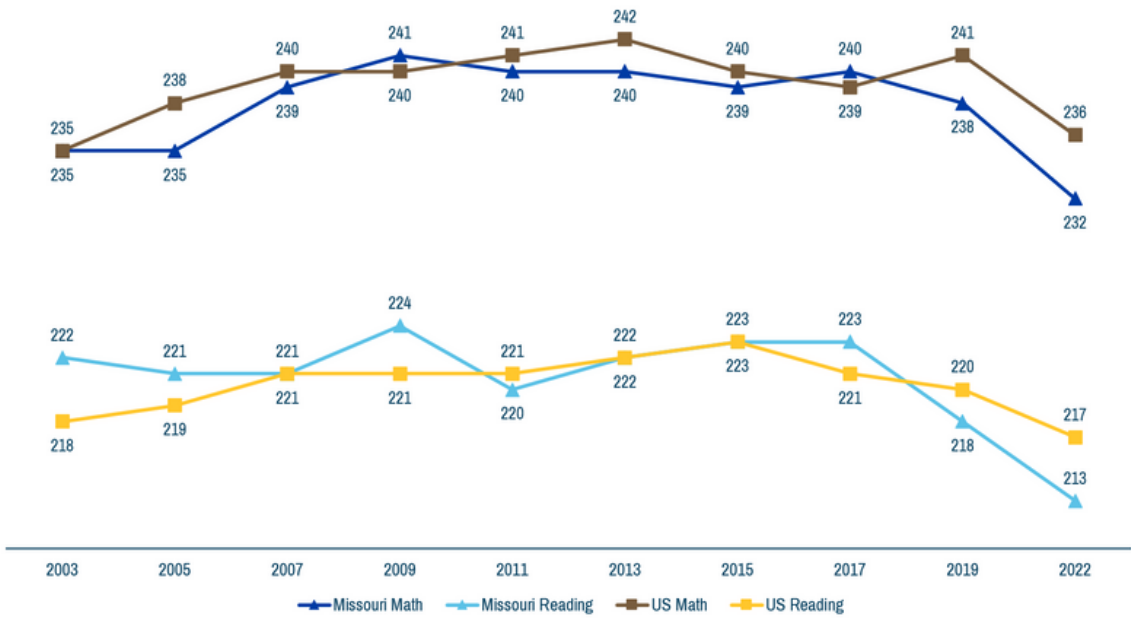


Figure 2 : 8th Grade NAEP Scores, Missouri and US, 2022

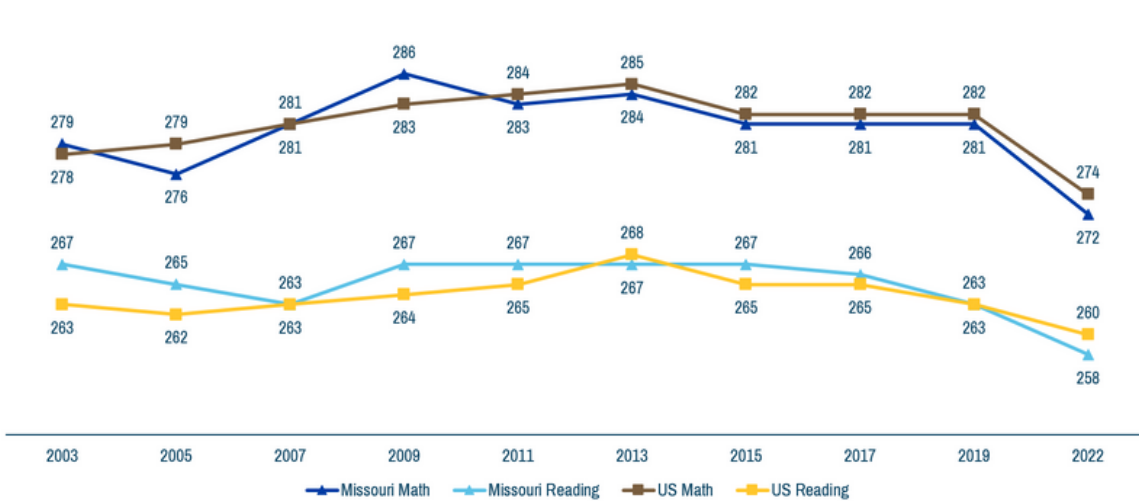
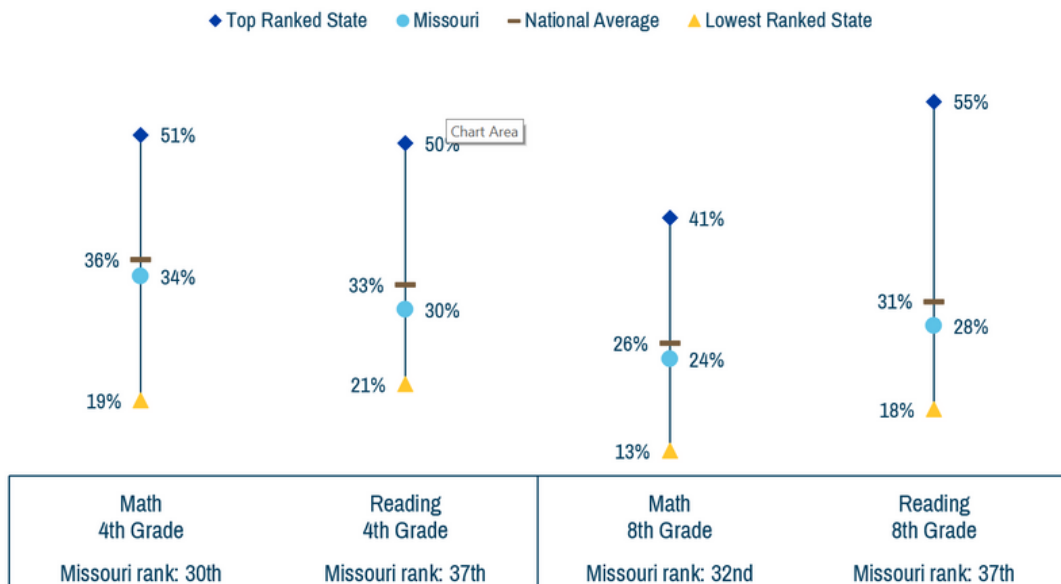


Figure 3 : Percent of NAEP Students Scoring Proficient & Advanced, 2022



SB 341 and HB 558 call for revising several areas of Missouri’s school accountability system including the annual school report card and rating system, indicator weighting, and interventions to address failing schools, among other areas.^{4,5} These proposed changes come in response to the decline in student performance and persistent race- and income-based achievement gaps. In this policy brief, we take a deeper dive into two specific components of school accountability systems—school rating systems and accountability indicator weights. We discuss the weight of academic growth within performance indicators at the elementary and middle school levels and consider the proposed changes to these areas under SB 341 and HB 558. We add evidence by examining school accountability systems in states with the high growth and conclude by providing policy recommendations based on our findings.

School Rating Systems and Indicator Weights are Key Decisions in School Accountability Systems

The type of school rating system and the weights given to indicators in school accountability systems are key decisions for states because they communicate the state’s priorities to stakeholders. An effective accountability system provides information that is: important, new, clear, accurate, and actionable.

An effective accountability system provides information that is: important, new, clear, accurate, and actionable.

School rating systems should reflect the state’s theory of action, the rationale behind the state’s strategies to meet intended outcomes, and the policy objectives of the state’s accountability system.⁶ ESSA requires school rating systems to allow for “annual meaningful differentiation” for all public schools.⁷ However, because ESSA does not prescribe a uniform school rating system, states’ approaches vary to meet this requirement (Table 1). A summative rating—which uses multiple school indicators to produce one overall rating—is often appealing in rating systems because it clearly communicates where a school stands and allows for easy comparison.⁸ Most states have chosen school rating systems that include this feature but vary on how the summative rating is communicated—through a score, grade, rank, or text.⁹ Importantly, states also vary on how they define each rating (e.g., what constitutes an “A” grade may be different state to state). Despite their wide use, limited research on summative ratings exists. Specifically, it is unclear whether ratings have a positive relationship with desired student outcomes or have unintended negative effects.¹⁰

Most states have chosen school rating systems that include a summative rating but vary on how it is communicated—through a score, grade, rank, or text.

Table 1 : School Accountability Rating Systems in U.S. States and District of Columbia

	Type of Rating System	Description	Number of States Using Rating System*
Rating Systems with Summative Ratings	1-5 Stars	A single 1-5 star rating is assigned to schools based on accountability indicators.	5
	A-F Rating System	A single A-F letter grade is assigned to schools based on summative accountability indicators.	13
	Descriptive	A text-based label (e.g., lowest performing, underperforming, commendable, and exemplary) is assigned based on an index score.	12
	Index Rating System	A single composite rating is assigned based on accountability indicators. The rating scale may be numeric or percentile.	10
Rating Systems without Summative Ratings	Dashboard	School performance results on multiple indicators are reported using a dashboard system; ratings for each indicator may or may not be assigned.	1
	Federal Tiers of Support	Schools are classified using a three-tiered system with increasing levels of support or intervention determined by accountability indicators. Schools in the lowest tier of performance are identified; other schools are not ranked or rated.	10

Sources: <https://www.ecs.org/50-state-comparison-states-school-accountability-systems/>; <https://nepc.colorado.edu/publication/report-cards>
 *As of December 2021

In addition to the rating system itself, the weights given to school accountability system indicators is another key decision for states. As with rating systems, the weighting methodology should reflect the state's priorities and overall vision for their education system. ESSA requires states to place significant weight on performance indicators—namely achievement, growth, and English language proficiency—but states have flexibility in setting their priorities for weighting. Essentially, if each state's accountability system is a pie, how the pie is sliced differs, and in some cases widely. For example, the weight given to achievement status across all states ranges from 20% to 64% at the elementary level, while the weight given to growth ranges from 18% to 55%.¹¹

Essentially, if each state's accountability system is a pie, how the pie is sliced differs, and in some cases widely. For example, the weight given to achievement status ranges from 20% to 64% across all states at the elementary level, while growth ranges from 18% to 55%.



School Accountability Systems in the Highest-Growth States Place Significant Weight on Achievement Status and Growth Indicators at the Elementary and Middle School Levels

Growth is a common performance indicator for elementary and middle schools. Notably, growth is a measure of students' progress towards learning standards over time, while achievement status is a point-in-time measure that evaluates how well students perform against a standard. Both are important measures but provide different information. Growth is less likely to be influenced by students' background characteristics (e.g., socioeconomic status). Schools seen as “low-performing” based on achievement status may show some of the highest academic growth, a point which is especially important as we think about school accountability.

A state's decision to emphasize growth in an accountability model is a crucial decision.¹² We examined the relationship between states' weighting of growth and states' growth rank^a in ELA and math and found a moderately strong relationship exists for each—as a state's growth ranking improves in ELA or math, the weighting of growth increases (Appendix A). This result may suggest that growth increases when a state requires an increased focus on it.

Table 2 highlights the weighting of achievement status and growth metrics for the highest-growth and lowest-growth states in ELA and math. The highest-growth states appear to heavily value achievement status and growth metrics—these metrics account for 70-95% of the overall rating. Additionally, in most of the highest-growth states (Arizona, District of Columbia, Florida, Hawaii, and Mississippi), growth accounts for at least 40% of the overall rating, and growth is weighted more than achievement status. In contrast, growth in the lowest-growth states is generally a smaller portion of the overall composition, and is also weighted less than achievement status. Missouri is ranked 37th for reading growth and 27th for math growth. The state values achievement status and growth equally in school accountability, but the total of these metrics is low (48%) in comparison with other states.¹³

The highest-growth states appear to heavily value achievement status and growth metrics—these metrics account for 70-95% of the overall rating. Additionally, in most of the highest-growth states, growth accounts for at least 40% of the overall rating, and growth is weighted more than achievement status.

^a Growth rank is based on scores on the 4th Grade National Assessment of Educational Progress (NAEP) between 2011 and 2022 in ELA and math.

Table 2 : Weight of Achievement Status and Growth Indicators in the Highest-Growth and Lowest-Growth States, as Compared to Missouri

	State	4th Grade NAEP Growth Ranking Reading*	4th Grade NAEP Growth Ranking Math*	Type of Accountability System	Growth Metrics as % of Total Accountability Rating	Achievement Status & Growth Metrics as % of Total Accountability
Highest-Growth States	Arizona	5	13	Federal Tiers of Support	50%	80%
	California	4	20	Dashboard	+	+
	District of Columbia	3	5	1-5 Stars	40%	70%
	Florida	7	3	A-F	50%	75%
	Hawaii	2	15	Index Rating System	40%	80%
	Louisiana	5	6	A-F	25%	75%
	Mississippi	1	1	A-F	54.28%	95%
	Nebraska	27	3	Descriptive	+	+
	Tennessee	7	2	A-F	35%	80%
	Missouri	37	27	Index Rating System	24%	48%
Lowest-Growth States	Connecticut	45	29	Index Rating System	42.1%	73.7%
	Delaware	50	45	Descriptive	40%	70%
	Kansas	39	45	Descriptive	+	+
	Maine	32	45	Descriptive	38%	80%
	Maryland	51	50	1-5 Stars	25%	45%
	Massachusetts	45	48	Descriptive	25%	65%
	New Hampshire	43	50	Federal Tiers of Support	+	+
	Pennsylvania	45	29	Federal Tiers of Support	+	+
	Vermont	45	48	Descriptive	0%	90%
	Vigninia	45	29	Federal Tiers of Support	+	+

*Indicator weighting not explicitly stated in state accountability plan.
Sources: See Appendix B

Missouri is ranked 37th for reading growth and 27th for math growth. The state values achievement status and growth equally in school accountability, but the total of of these metrics is low (48%) in comparison with other states.

Some of the Highest-Growth States Include a Metric that Focuses on the Growth of the Lowest-Performing Students

In Florida and Mississippi, the growth metric is delineated and split evenly between growth of all students and growth of the lowest achieving students.^{14, 15} Including a metric that focuses on the growth of the lowest performing students may encourage LEAs and schools to focus more heavily on serving the educational needs of these students. Additionally, this might decrease the likelihood of a summative rating masking significant achievement gaps.

Missouri's School and LEA Report Cards Lack a Summative Rating

Missouri currently utilizes an index rating system, the results of which are shared on LEA- and school-level Annual Performance Reports (APR). While a summative rating is produced through the current system (known as the APR score), this rating does not appear on LEA or school report cards. Critics have argued the state's report cards do not provide a clear way to indicate standing and differentiate LEAs and schools.¹⁶ The state has added a dashboard system in recent years that provides easier access to LEA report card information. However, it does not provide the APR score, add context for the information provided, or provide information at the school level. ESSA requires report cards to be concise, understandable and accessible. Some have questioned Missouri's current report card system and indicated it has room for improvement.¹⁷ When considering the earlier criteria (important, new, clear, accurate, and actionable), the current system lacks clarity in distinguishing between LEAs and schools and fails to provide actionable context to areas that LEAs and schools may be deficient. During the February State Board of Education Meeting, the Missouri Department of Elementary and Secondary Education (DESE) indicated that the upcoming APR release will have LEA- and school-level building reports with easy to read summary information and links to supporting detail which may address some of the previous concerns.¹⁸

Proposed Changes to Missouri's School Accountability System: A-F Rating System and Increased Achievement Metrics

The proposed legislation (SB 341 and HB 558) call for the state to switch to an A-F rating system, which utilizes common letter grades to communicate LEA and school performance. The act enlists DESE to create annual report cards for all LEAs and schools that include the grade earned, school performance metrics on accountability measures, MAP results (schoolwide and broken down by student groups), and school improvement information.¹⁹ Additionally, this act places more emphasis on school-level reporting, instead of LEA-level reporting only. LEAs would be required to communicate the school report card to parents annually, at least one month prior to the beginning of the school year. A key point of the legislation is to provide meaningful interventions to support LEAs and schools who earn poor letter grades and to hold schools accountable if they fail to improve.

The annual grade assigned to LEAs and schools would be heavily focused on performance metrics (achievement status and growth) based on MAP testing. For elementary and middle schools, 90% of their overall grade would be based on achievement status and growth (Table 3). The indicator weighting would be evenly split between achievement status and growth, and the growth metric would be composed of both growth in the overall student population and growth in students from the subgroup who earned basic or below basic on the MAP.

Table 3 : Proposed Changes to Missouri's Elementary and Middle School Performance Metric Weighting

	Achievement			Growth			Achievement & Growth Metrics as % of
	All Students	Student Groups	Total	All Students	Student Groups	Total	Total Accountability Rating
MSIP 6	16%	8%	24%	16%	8%	24%	48%
SB 341 / HB 558	45%	0%	45%	22.5%	22.5%	45%	90%

Sources: <https://dese.mo.gov/media/pdf/msip-6-comprehensive-guide>; https://www.senate.mo.gov/23info/BTS_Web/Bill.aspx?SessionType=R&BillID=44719; <https://house.mo.gov/Bill.aspx?bill=HB558&year=2023&code=R>

The proposed legislation would increase the overall weight given to performance metrics from 48% to 90% at the elementary and middle school level, though it maintains that achievement status and growth be valued equally. Additionally, it calls for particular student groups to be emphasized differently than they are in the present system (MSIP 6). Currently, the state differentiates between the achievement status and growth of all students and students in the “super subgroup” who typically perform below the state average: low-income students, students with disabilities, English language learners, and the state’s major racial and ethnic groups.²⁰ The legislation also includes a metric to measure the performance of a subgroup of students—those who earn basic or below basic on the MAP. Notably, this subgroup would only be accounted for in the growth metric.

As discussed, states with high growth value achievement status and growth highly in the overall rating system, as is suggested by the proposed legislation. However, these states also tend to place a greater emphasis on growth over achievement, a difference not addressed by the proposed act. Increasing student achievement levels in the state cannot come without increasing growth. Thus, if Missouri’s goals are to push students towards higher achievement, the state should consider valuing growth more highly in their rating system.

The proposed legislation would increase the overall weight given to performance metrics from 48% to 90% at the elementary and middle school level, though it maintains that achievement status and growth be valued equally. The legislation also includes a metric to measure the performance of a subgroup of students—those who earn basic or below basic on the MAP.



Recommendations

As students recover from COVID-induced learning loss, it will be even more important to focus on growth. An increased focus on growth would direct attention to the students' progress, and not penalize those who were disproportionately affected. With this in mind, we recommend the following:

1. Increase the weight of growth. We find states who are top-ranking nationally in student growth in ELA and math place heavier emphasis on growth in their performance metrics. It is likely that schools in these states focus more on growth because of the increased weight of growth. Additionally, increasing the weight of growth allows for educator effectiveness to shine through and supports students and educators as they recover from the pandemic.
2. Incentivize the growth of lower-performing students. Florida and Mississippi are examples of states with high overall growth but who also focus on the growth of the lowest performing students—25% of their overall rating comes from this metric. Including a metric that focuses on the growth of the lowest performing students (those whose proficiency level is below basic or basic) may encourage LEAs and schools to focus more heavily on serving these students.
3. Provide a summative rating on LEA and school report cards with a description of what that rating indicates. The addition of Missouri's current summative rating (the APR score) to report cards could provide a distinguishable metric that communicates the overall performance of a LEA or school and allow for clear differentiation of LEAs and schools. To add clarity and context, the report card should also include a description of what a particular rating or range of ratings indicates. The combination of these changes could make school accountability information more accessible and useful to stakeholders to make informed decisions about education.

An effective school accountability system provides information that is: important, new, clear, accurate, and actionable. When it comes to student performance on tests of reading and math, SB 341 and HB 558 would create a system of accountability that meets these criteria much more closely than the system currently in place.

As students recover from COVID-induced learning loss, it will be even more important to focus on growth. An increased focus on growth would direct attention to the students' progress, and not penalize those who were disproportionately affected.

About the Authors

Mel Fenske is a Research Associate with the SLU PRiME Center and St. Louis Public Schools partnership.

Ashley Donaldson Burle is the Chief of Operations and a Research Fellow at the SLU PRiME Center and a doctoral candidate in the Higher Education Administration program at Saint Louis University.

Meg Gorton is a senior Spanish major and education minor at Saint Louis University and an undergraduate research assistant with the SLU PRiME Center.

References

- 1 Donaldson Burle A., & Fenske, M. (2023). Missouri's School Accountability System. SLU PRiME Center. <https://www.sluprime.org/policy-brief-database/mo-school-accountability-system>
- 2 Hall, R., Donaldson Burle, A., & Jeffers, M. (2022). Missouri's 2022 NAEP Scores: Decades of Achievement Gains Erased, Unprecedented Achievement Gaps. SLU PRiME Center. <https://www.sluprime.org/policy-brief-database/mo-2022-naep-results>
- 3 Donaldson Burle, A. (2022). Key Takeaways from Missouri's 2022 MAP Results. SLU PRiME Center. <https://www.sluprime.org/prime-blog/2022-map-results>
- 4 Establishes accountability measures for all public elementary and secondary schools, S. 341, 102nd Cong. (2023). https://www.senate.mo.gov/23info/BTS_Web/Bill.aspx?SessionType=R&BillID=44719
- 5 To repeal sections 160.522 and 161.092, RSMo, and to enact in lieu thereof six new sections relating to accountability measures for elementary and secondary schools. HB. 558, 102nd Cong. (2023). <https://house.mo.gov/billtracking/bills231/hlrbillspdf/0852H.02I.pdf>
- 6 Office of Elementary and Secondary Education (2020, September 15). Module 2A: State's System of Annual Meaningful Differentiation (AMD). <https://oese.ed.gov/resources/oese-technical-assistance-centers/state-support-network/resources/module-2a-states-system-annual-meaningful-differentiation-amd/>
- 7 Erwin, B., Francies, C., Pechota, D., & McCann, M. (2021, December 8). 50-State Comparison: States' School Accountability Systems. Education Commission of the States. <https://www.ecs.org/50-state-comparison-states-school-accountability-systems/>
- 8 (6)
- 9 Dalton, B. (2017). The Landscape of School Rating Systems. RTI Press Publication No. OP-0046-1709-. Research Triangle Park, NC: RTI Press. <https://doi.org/10.3768/rtipress.2017.op.0046.1709>
- 10 Sunderman, G.L. (2022). State Accountability Rating Systems: A Review of School Report Cards as Indicators of School Quality. Boulder, CO: National Education Policy Center. <http://nepc.colorado.edu/publication/report-cards>
- 11 Portz, J., Beauchamp, N. (2022). Educational Accountability and State ESSA Plans. *Education Policy*, 36(3), 717-747. <https://doi.org/10.1177/0895904820917364>
- 12 Council of Chief State School Officers. (2017, January). Considerations for Including Growth in ESSA State Accountability Systems. <https://ccsso.org/sites/default/files/2017-10/CCSSOGrowthInESSAAccountabilitySystems1242017.pdf>
- 13 Missouri Department of Elementary and Secondary Education. (2022). MSIP 6 Comprehensive Guide. <https://dese.mo.gov/media/pdf/msip-6-comprehensive-guide>
- 14 Florida Department of Education. (2022). "2021-22 guide to calculating school grades, district grades, and the federal percent of points index." <https://www.fldoe.org/core/fileparse.php/18534/urlt/SchoolGradesCalcGuide22.pdf>
- 15 Mississippi Department of Education. (2022). "Understanding the Mississippi accountability system for grading schools and districts." https://www.mdek12.org/sites/default/files/Offices/MDE/OCGR/understanding_accountability.pdf
- 16 Moxley, E. (2019, October 17). Missouri Redesigns School Report Cards - And It's A Lot To Digest. St. Louis Public Radio. <https://news.stlpublicradio.org/education/2019-10-17/missouri-redesigns-school-report-cards-and-its-a-lot-to-digest>
- 17 Pendergrass, S. (2021, October 28). Sometimes the truth hurts: On Missouri's low-performing schools. *Springfield News-Leader*. <https://www.news-leader.com/story/opinion/2021/10/28/sometimes-truth-hurts-missouris-low-performing-schools/6174041001/>
- 18 Missouri Department of Elementary and Secondary Education. (2023). February 2023 Update on Missouri School Improvement Program (MSIP) 6. <https://dese.mo.gov/media/pdf/february-2023-update-missouri-school-improvement-msip-6>
- 19 (4)
- 20 (13)

Appendix A: Growth Rankings in ELA and Math and Growth and Achievement Indicator Weighting, By State

State	ELA Rank	Math Rank	% Growth	% Achievement & Growth
Alabama	32	7	40	80
Alaska	27	36	40	70
Arizona	5	13	50	80
Arkansas	16	36	50	85
California	4	20	+	+
Colorado	23	41	60	23.3
Connecticut	45	29	42.1	73.7
Delaware	50	45	40	70
District of Columbia	3	5	40	70
Florida	7	3	50	75
Georgia	16	15	35	65
Hawaii	2	15	40	80
Idaho	23	15	36	72
Illinois	16	7	50	75
Indiana	16	20	42.5	85
Iowa	16	15	36	48
Kansas	39	45	+	+
Kentucky	37	24	35	96
Louisiana	5	6	25	75
Maine	32	45	38	80
Maryland	51	50	25	45
Massachusetts	45	48	25	65
Michigan	32	15	37.78	70
Minnesota	32	43	+	+
Mississippi	1	1	54.28	95
Missouri	37	27	24	48
Montana	27	27	30	55
Nebraska	27	3	+	+
Nevada*	12	29	35	60
New Hampshire	43	50	+	+
New Jersey	43	43	40	70
New Mexico	16	41	40	70
New York	39	29	+	+
North Carolina	27	36	20	80
North Dakota	39	24	30	60
Ohio	14	23	+	+
Oklahoma	32	24	35.3	76.5
Oregon	27	29	+	+
Pennsylvania	45	29	+	+
Rhode Island	23	36	+	+
South Carolina	7	13	35	70
South Dakota	14	7	40	80
Tennessee	7	2	35	80
Texas	12	11	50	80
Utah	7	11	54	91.33
Vermont	45	48	0	90
Virginia	45	29	+	+
Washington	16	40	50	90

State	ELA Rank	Math Rank	% Growth	% Achievement & Growth
West Virginia	39	29	28	56
Wisconsin	23	20	37.5	75
Wyoming	7	7	25	50

Source: <https://oese.ed.gov/offices/office-of-formula-grants/school-support-and-accountability/essa-consolidated-state-plans/>
+ Indicator weighting not explicitly stated in state accountability plan

Correlation Notes: n=40; 40 out of 51 states had indicator weighting explicitly stated in their accountability plans and were included in the correlation calculations. The correlation for ELA rank and % growth was $r = .44$, $p = .00$ indicating a moderate relationship exists. The correlation for math rank and % growth was $r = .29$, $p = .06$ indicating a moderate relationship exists. A more robust analysis would be needed to determine if increasing growth in school accountability systems predicts growth in ELA and math.

Appendix B: Table 2 Sources

State	Source
Arizona	https://azsbe.az.gov/sites/default/files/media/21-22%20K-8%20A-F%20Plan.pdf
California	https://oese.ed.gov/files/2019/12/California-Final-Consolidated-State-Plan-PDF.pdf
District of Columbia	https://sboe.dc.gov/sites/default/files/dc/sites/sboe/page_content/attachments/OSSE%20ESSA%20State%20Plan_%20March%2017%202017%20Final.pdf
Florida	https://www.fdoe.org/core/fileparse.php/18534/urlt/SchoolGradesCalcGuide22.pdf
Hawaii	https://oese.ed.gov/offices/office-of-formula-grants/school-support-and-accountability/essa-consolidated-state-plans/esea-states-plan-hawaii/hawaii-final-consolidated-state-plan-pdf/
Louisiana	https://www.louisianabelieves.com/docs/default-source/louisiana-believes/louisianas-essa-state-plan.pdf?sfvrsn=4
Mississippi	https://www.mdek12.org/sites/default/files/Offices/MDE/OCGR/understanding_accountability.pdf
Nebraska	https://cdn.education.ne.gov/wp-content/uploads/2018/06/Nebraska_ESSA_Final.pdf
Tennessee	https://www.tn.gov/content/dam/tn/education/accountability/2021-2022_Accountability_Protocol_v3_Aug2022.pdf
Missouri	https://dese.mo.gov/media/pdf/msip-6-comprehensive-guide
Connecticut	https://portal.ct.gov/-/media/SDE/ESSA/august_4_ct_consolidated_state_essa_plan.pdf?la=en
Delaware	https://doewebmaster.wpunepowered.com/wp-content/uploads/2022/10/DSSF_Tech-Manual_10_12_22.pdf
Kansas	https://www.ksde.org/Portals/0/ECSETS/ESEA/KSconsolidatedstateplan01182018_Approved.pdf
Maine	https://www.maine.gov/doe/sites/maine.gov.doefiles/inline-files/ME_ConsolidatedStatePlan%20VF%20with%20signature.pdf
Maryland	https://www.marylandpublicschools.org/about/Documents/ESSA/ESSAMDSsubmissionConsolidatedStatePlan091718.pdf
Massachusetts	https://www.doe.mass.edu/federalgrants/essa/stateplan/
New Hampshire	https://www.education.nh.gov/sites/g/files/ehbemt326/files/inline-documents/sonh/essa-consolidated-state-plan.pdf
Pennsylvania	https://oese.ed.gov/offices/office-of-formula-grants/school-support-and-accountability/essa-consolidated-state-plans/pennsylvania-state-plan/pennsylvania-final-consolidated-state-plan-pdf/
Vermont	https://education.vermont.gov/sites/aoe/files/documents/edu-essa-vermont-state-plan-final-20180705.pdf
Virginia	https://oese.ed.gov/files/2019/12/Virginia-Final-Consolidated-State-Plan-PDF.pdf