

A FY 2023 Comparative Review of 30 Mississippi School Districts: Instruction

A Report to the Mississippi Legislature
Report #693
October 24, 2023



PEER Committee

Jerry Turner, Chair

Charles Younger, Vice-Chair

Sollie Norwood, Secretary

Senators:

Kevin Blackwell

Lydia Chassaniol

Dean Kirby

Chad McMahan

John Polk

Representatives:

Richard Bennett

Cedric Burnett

Becky Currie

Carolyn Crawford

Timmy Ladner

Percy Watson

Executive Director:

James F. (Ted) Booth

About PEER:

The Mississippi Legislature created the Joint Legislative Committee on Performance Evaluation and Expenditure Review (PEER Committee) by statute in 1973. A joint committee, the PEER Committee is composed of seven members of the House of Representatives appointed by the Speaker of the House and seven members of the Senate appointed by the Lieutenant Governor. Appointments are made for four-year terms, with one Senator and one Representative appointed from each of the U.S. Congressional Districts and three at-large members appointed from each house. Committee officers are elected by the membership, with officers alternating annually between the two houses. All Committee actions by statute require a majority vote of four Representatives and four Senators voting in the affirmative.

Mississippi's constitution gives the Legislature broad power to conduct examinations and investigations. PEER is authorized by law to review any public entity, including contractors supported in whole or in part by public funds, and to address any issues that may require legislative action. PEER has statutory access to all state and local records and has subpoena power to compel testimony or the production of documents.

PEER provides a variety of services to the Legislature, including program evaluations, economy and efficiency reviews, financial audits, limited scope evaluations, fiscal notes, and other governmental research and assistance. The Committee identifies inefficiency or ineffectiveness or a failure to accomplish legislative objectives, and makes recommendations for redefinition, redirection, redistribution and/or restructuring of Mississippi government. As directed by and subject to the prior approval of the PEER Committee, the Committee's professional staff executes audit and evaluation projects obtaining information and developing options for consideration by the Committee. The PEER Committee releases reports to the Legislature, Governor, Lieutenant Governor, the agency examined, and the general public.

The Committee assigns top priority to written requests from individual legislators and legislative committees. The Committee also considers PEER staff proposals and written requests from state officials and others.



Joint Legislative Committee on Performance Evaluation and Expenditure Review

PEER Committee

P.O. Box 1204 | Jackson, Mississippi 39215-1204

October 24, 2023

Representatives

Jerry Turner

Chair

Richard Bennett

Cedric Burnett

Carolyn Crawford

Becky Currie

Timmy Ladner

Percy Watson

Honorable Tate Reeves, Governor

Honorable Delbert Hosemann, Lieutenant Governor

Honorable Philip Gunn, Speaker of the House

Members of the Mississippi State Legislature

On October 24, 2023, the PEER Committee authorized release of the report titled ***A FY 2023 Comparative Review of 30 Mississippi School Districts: Instruction.***

Senators

Charles Younger

Vice Chair

Sollie Norwood

Secretary

Kevin Blackwell

Lydia Chassaniol

Dean Kirby

Chad McMahan

John Polk

A handwritten signature in black ink that reads "Jerry R. Turner". The signature is written in a cursive style with a large, looping initial "J".

Executive Director

James F. (Ted) Booth

Representative Jerry Turner, Chair

This report does not recommend increased funding or additional staff.

Phone: (601) 359-1226 | Fax: (601) 359-1420 | www.peer.ms.gov

Woolfolk Building | 501 North West St, Suite 301-A | Jackson, MS 39201

This page left intentionally blank.

Table of Contents

Letter of Transmittal	i
List of Exhibits.....	iv
Report Highlights.....	ix
Restrictions	1
Grade Inflation	2
Mastery Decline.....	18
Proficiency and “Bubble”	34
Resource Implementation Fidelity	63
Appendix: List of School Districts Included in This Review	71

List of Exhibits

Exhibit 1: Math A and B Inflation Percentage by Grade	3
Exhibit 2: ELA A and B Inflation Percentage by Grade	4
Exhibit 3: 3 rd Grade Math A and B Inflation Percentage	5
Exhibit 4: 4 th Grade Math A and B Inflation Percentage	6
Exhibit 5: 5 th Grade Math A and B Inflation Percentage	7
Exhibit 6: 6 th Grade Math A and B Inflation Percentage	8
Exhibit 7: 7 th Grade Math A and B Inflation Percentage	9
Exhibit 8: 8 th Grade Math A and B Inflation Percentage	10
Exhibit 9: 3 rd Grade ELA A and B Inflation Percentage	11
Exhibit 10: 4 th Grade ELA A and B Inflation Percentage	12
Exhibit 11: 5 th Grade ELA A and B Inflation Percentage	13
Exhibit 12: 6 th Grade ELA A and B Inflation Percentage	14
Exhibit 13: 7 th Grade ELA A and B Inflation Percentage	15
Exhibit 14: 8 th Grade ELA A and B Inflation Percentage	16
Exhibit 15: Percentage of Math Students with Mastery Decline by Grade	20
Exhibit 16: Percentage of ELA Students with Mastery Decline by Grade	20
Exhibit 17: Percentage of 3 rd Grade Math Students with Mastery Decline by District	21
Exhibit 18: Percentage of 4 th Grade Math Students with Mastery Decline by District	22
Exhibit 19: Percentage of 5 th Grade Math Students with Mastery Decline by District	23
Exhibit 20: Percentage of 6 th Grade Math Students with Mastery Decline by District	24
Exhibit 21: Percentage of 7 th Grade Math Students with Mastery Decline by District	25
Exhibit 22: Percentage of 8 th Grade Math Students with Mastery Decline by District	26
Exhibit 23: Percentage of 3 rd Grade ELA Students with Mastery Decline by District	27
Exhibit 24: Percentage of 4 th Grade ELA Students with Mastery Decline by District	28
Exhibit 25: Percentage of 5 th Grade ELA Students with Mastery Decline by District	29

Exhibit 26: Percentage of 6 th Grade ELA Students with Mastery Decline by District	30
Exhibit 27: Percentage of 7 th Grade ELA Students with Mastery Decline by District	31
Exhibit 28: Percentage of 8 th Grade ELA Students with Mastery Decline by District	32
Exhibit 29: Percentage of Proficient Math Students on the 2022-2023 Benchmark Assessment	35
Exhibit 30: Percentage of Proficient ELA Students on the 2022-2023 Benchmark Assessment	36
Exhibit 31: Percentage of Math Bubble Students on the 2022-2023 Benchmark Assessment	36
Exhibit 32: Percentage of ELA Bubble Students on the 2022-2023 Benchmark Assessment	37
Exhibit 33: Percentage of Proficient 3 rd Grade Math Students on the 2022-2023 Benchmark Assessment.....	38
Exhibit 34: Percentage of Proficient 4 th Grade Math Students on the 2022-2023 Benchmark Assessment.....	39
Exhibit 35: Percentage of Proficient 5 th Grade Math Students on the 2022-2023 Benchmark Assessment.....	40
Exhibit 36: Percentage of Proficient 6 th Grade Math Students on the 2022-2023 Benchmark Assessment.....	41
Exhibit 37: Percentage of Proficient 7 th Grade Math Students on the 2022-2023 Benchmark Assessment.....	42
Exhibit 38: Percentage of Proficient 8 th Grade Math Students on the 2022-2023 Benchmark Assessment.....	43
Exhibit 39: Percentage of Proficient 3 rd Grade ELA Students on the 2022-2023 Benchmark Assessment.....	44
Exhibit 40: Percentage of Proficient 4 th Grade ELA Students on the	

2022-2023 Benchmark Assessment.....	45
Exhibit 41: Percentage of Proficient 5 th Grade ELA Students on the 2022-2023 Benchmark Assessment.....	46
Exhibit 42: Percentage of Proficient 6 th Grade ELA Students on the 2022-2023 Benchmark Assessment.....	47
Exhibit 43: Percentage of Proficient 7 th Grade ELA Students on the 2022-2023 Benchmark Assessment.....	48
Exhibit 44: Percentage of Proficient 8 th Grade ELA Students on the 2022-2023 Benchmark Assessment.....	49
Exhibit 45: Percentage of 3 rd Grade Math Bubble Students on the 2022-2023 Benchmark Assessment.....	50
Exhibit 46: Percentage of 4 th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment.....	51
Exhibit 47: Percentage of 5 th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment.....	52
Exhibit 48: Percentage of 6 th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment.....	53
Exhibit 49: Percentage of 7 th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment.....	54
Exhibit 50: Percentage of 8 th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment.....	55
Exhibit 51: Percentage of 3 rd Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment.....	56
Exhibit 52: Percentage of 4 th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment.....	57
Exhibit 53: Percentage of 5 th Grade ELA Bubble Students on the	

2022-2023 Benchmark Assessment.....	58
Exhibit 54: Percentage of 6 th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment.....	59
Exhibit 55: Percentage of 7 th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment.....	60
Exhibit 56: Percentage of 8 th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment.....	61
Exhibit 57: Percentage of Districts in Which at Least 75% of Students Met the Implementation Fidelity Threshold, Math and ELA.....	65
Exhibit 58: Percentage of Districts in Which at Least 75% of Students Met 50% of the Implementation Fidelity Threshold (Partial), Math and ELA	65
Exhibit 59: Percentage of Students in Each Resource Implementation Fidelity Tier	66
Exhibit 60: Percentage of Math Students in Each Resource Implementation Fidelity Tier by District	67
Exhibit 61: Percentage of ELA Students in Each Resource Implementation Fidelity Tier by District.....	68
Exhibit 62: Percentage Student Growth in Each Resource Implementation Fidelity Tier by Subject (Math and ELA)	69

This page left intentionally blank.

BACKGROUND

In FY 2023, PEER received funding to contract with GlimpseK12 (an education technology company headquartered in Huntsville, Alabama) to conduct a comparative review of 30 school districts. This report focuses on the area of instruction. For reports on non-instructional areas for FY 2022, see PEER Report #690.

This report contains the following instructional analyses: grade inflation, mastery decline, student proficiency and bubble, and resource implementation fidelity.

GRADE INFLATION

Grade inflation is evidenced when students receive high grades--e.g., As and Bs--but do not score proficient on state evaluation exams.

Grade inflation negatively impacts students because high grades give the impression to students and parents that students have mastered the required content, although subsequent state evaluation exams do not demonstrate that mastery.

KEY FINDINGS

- For the 2022-2023 school year, approximately one-third of the scores of students in grades 3rd through 8th in the districts reporting demonstrated grade inflation in Math and English Language Arts (ELA). Student scores in 8th grade ELA exhibited the highest level of grade inflation at 40%.
- Although some level of grade inflation is expected, districts with greater than 25% inflation in a grade level should conduct a systemic review of grading practices.

MASTERY DECLINE

School districts use benchmark assessments during a school year to monitor students' mastery of a subject. *Mastery decline* is evidenced when a student scores lower on a benchmark assessment at the end of the school year than at the beginning of the school year, even if the decline is one point.

Mastery decline negatively impacts a student's performance and confidence, creates challenges and additional expenses for school districts in addressing such, leads to higher dropout rates, and reduces a student's preparedness for college and career entry.

KEY FINDINGS

- For the 2022-2023 school year, approximately one-third of students in grades 3rd through 8th in the districts reporting demonstrated mastery decline in Math and ELA. Students in 8th grade ELA demonstrated the greatest decline at 52%.
- Factors contributing to mastery decline include absenteeism, summer break, ineffective instructional practices, misaligned resources, course scheduling, and ineffective processes to identify, track, and mitigate students with mastery decline.

To measure students' mastery of a subject, districts use two common types of formative/benchmark assessments:

- 1) **Adaptive Assessments:** Adaptive assessments are characterized by their ability to assess a student's starting point (on or off grade level) and ending point (on or off grade level). These assessments are useful to track how far a student has progressed from the start of the year to the end regardless of where the student started.
- 2) **On Grade Level Benchmarking:** On grade level benchmark assessments are characterized by their ability to assess a student's level of mastery based on current grade level content at the beginning of the year and again on current grade level content at the end of the year.

Since each method assesses students' mastery based on different criteria, comparisons and conclusions between the assessments should be avoided. This report differentiates between the two methods using different colors in the relevant mastery decline tables on pages 21-32.

STUDENT PROFICIENCY AND BUBBLE

Education assessments use a benchmark score threshold to identify whether a student is proficient in the required content, with students scoring above the threshold being proficient.

Students scoring within 3% to 5% above or below the proficiency threshold represent an important cohort because these students often vacillate above and below the proficiency threshold and if left unidentified, may struggle to grow academically. This group is referred to in this report as the “bubble” group.

KEY FINDINGS

For the 2022-2023 school year and for students in grades 3rd through 8th in the districts reporting,

- approximately one-fifth of students scored within 3% above or below the proficiency threshold in Math; and,
- approximately one-sixth of students scored within 3% above or below the proficiency threshold in English Language Arts.

RESOURCE IMPLEMENTATION FIDELITY

Resource implementation fidelity refers to the extent to which districts implement an education program or practice as planned or intended by developers.

Deviations from intended use and delivery methods may compromise the effectiveness of the educational program or resource and negatively impact students’ educational preparedness.

KEY FINDINGS

For the 2022-2023 school year and for students in grades 3rd through 8th in the districts reporting,

- 44% and 47% of students met the resource implementation fidelity thresholds in Math and English Language Arts, respectively; and,
- 39% and 35% of students did not meet at least 50% of the resource implementation fidelity thresholds in Math and English Language Arts, respectively.

SUMMARY OF RECOMMENDATIONS FOR DISTRICTS

Grade Inflation recommendations:

- Implement an annual review process to identify, track, and manage grade inflation each year.
- Review the level of rigor and alignment of assignments and assessments in grade levels presenting high inflation.
- See page 17 for a full listing of recommendations pertaining to grade inflation.

Mastery Decline recommendations:

- Utilize software applications or other processes that automate the identification and tracking of decline in mastery.
- Create detailed reports that provide an overview of decline in mastery at various levels, including district, school, grade, and classroom. These reports should enable educators to pinpoint where decline in mastery is occurring to provide targeted support.
- See page 33 for a full listing of recommendations pertaining to mastery decline.

Student Proficiency and Bubble recommendations:

- Allocate a person or team to manage the proficiency and bubble student analysis process.
- Employ a software application or process that effectively generates proficiency and bubble student analysis, and create comprehensive reports at different levels (district, school, grade, and classroom) that will identify the bubble groups.
- See page 62 for a full listing of recommendations pertaining to student proficiency.

Resource Implementation Fidelity recommendations:

- Maintain a process or software application to closely monitor the resource implementation fidelity and effectiveness of all purchased resources.
- Conduct intra-year evaluations of implementation fidelity and effectiveness.
- See page 70 for a full listing of recommendations pertaining to resource implementation fidelity.

A FY 2023 Comparative Review of 30 Mississippi School Districts: Instruction

Restrictions

For this comparative review, GlimpseK12 selected 30 Mississippi school districts that reflect varying sizes (based on student enrollments), geographic regions, and accountability ratings across the state.¹ See the Appendix on page 71 for a list of the districts included in this review.

GlimpseK12 provided this report to the PEER Committee based on data and extrapolated information provided by the school districts for school year 2022-2023. GlimpseK12 did not independently verify the data or information provided by the districts or their programs. If the districts choose to provide additional data or information, GlimpseK12 reserves the right to amend the report.

All decisions made concerning the contents of this report are understood to be the sole responsibility of any organization or individual making the decision. GlimpseK12 does not and will not in the future perform any management functions for any organizations or individuals related to this report.

This report is solely intended to be a resource guide.

PEER staff contributed to the overall message of this report and recommendations based on the data and information provided by GlimpseK12. PEER staff also provided quality assurance and editing for this report to comply with PEER writing standards; however, PEER did not validate the source data collected by GlimpseK12.

¹The Mississippi Statewide Accountability System assigns a performance rating of A, B, C, D, or F to each school district based on established criteria regarding student achievement, student growth, graduation rate, and participation rate.

Grade Inflation

Grade inflation is evidenced when students receive high grades--e.g., As and Bs--but do not score proficient on state evaluation exams. Grade inflation negatively impacts students because high grades give the impression to students and parents that students have mastered the required content, although subsequent state evaluation exams do not demonstrate that mastery. Grade inflation contributes to a weak educational foundation that impairs the student's performance in future grades and on future evaluation exams. For the 2022-2023 school year, approximately one-third of the scores of students in grades 3rd through 8th in the districts reviewed demonstrated grade inflation in Math and English Language Arts.

As noted previously, this report presents an assessment of data from 30 school districts for the 2022-2023 school year.

Course grades are the primary method of communicating student progress between schools, parents, and students. Grading practices that align mastery of state standards with course grades are a core component of the instructional process and essential to a well-functioning educational system. When students receive high grades, both parents and students assume that the students have mastered the required content.

Unfortunately, grading practices can become misaligned with mastery of state standards. This results in grade inflation. When grade inflation is present, students receive high course grades (i.e., As and Bs) even though they have not mastered the required state content.

Impact of Grade Inflation

Districts across the country are battling systemic grade inflation, compliance-based vs. mastery-based grading policies,² and bias. The ramifications of grade inflation can often be severe and negatively impact student achievement for years. A major reason for this is that misaligned grading practices send the wrong signals to parents and students.

When a student receives an inflated grade, both the student and parents assume the child is mastering all the required content. This causes several downstream problems. First, there is no "alarm bell" to alert parents and students that there is an issue. Second, the student may not test proficient on standardized tests. Third, the weak foundation hurts future student performance as the student progresses to more advanced content and advanced courses.

Analysis

GlimpseK12 conducted a review of the 2022-2023 school year end of 3rd - 8th course grades and corresponding Mississippi Academic Assessment Program (MAAP) state test scores to determine whether there are opportunities for improvement in aligning grading practices with mastering the required state standards curriculum. According to information from the Mississippi Department of Education, the 3rd - 8th grade MAAP assessment is designed to measure students' knowledge, skills, and academic progress in Mathematics and English Language Arts subjects. Districts receive MAAP results in a scale score and a performance level score. A scale score represents the total

² *Compliance-based grading* occurs when grades are associated with activities that are tied to things outside of mastering standards, such as actions, formatting, or following directions. *Mastery-based grading* occurs when grades are tied specifically to the mastery of academic standards.

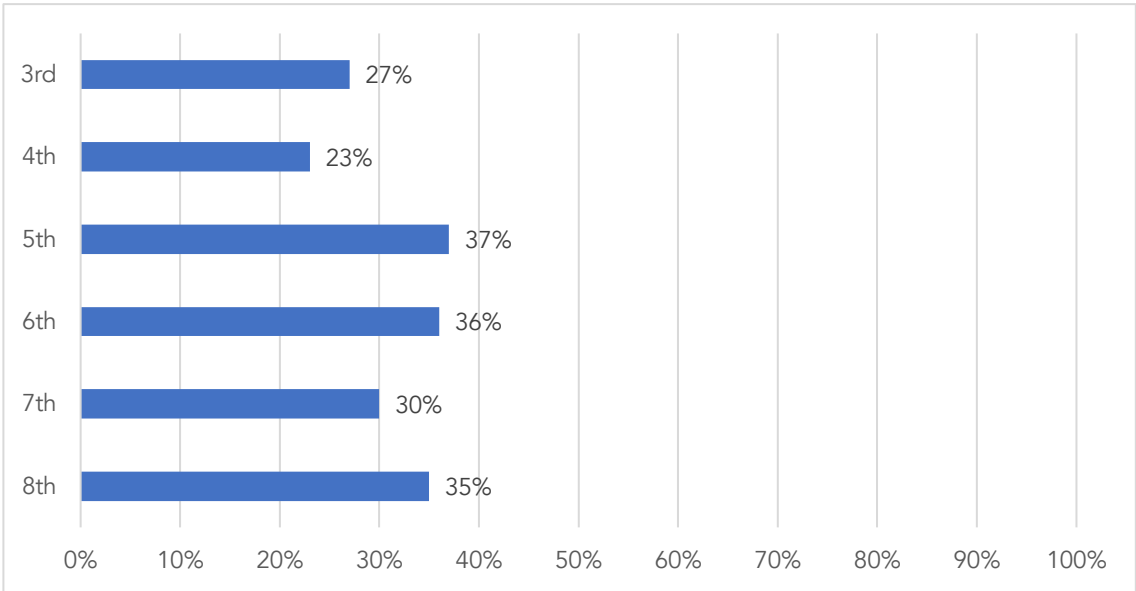
number of correct answers that have been converted into a consistent and standardized scale. A scaled score allows for a direct and fair comparison between years. GlimpseK12 used the MAAP scale scores for Mathematics and English Language Arts for this analysis.

The analysis utilized students' Math and English Language Arts (ELA) course grades and their corresponding Math or English Language Arts state test scores. The two data points were used to identify what percentage of students receiving As and Bs were non-proficient on the state test (which was possibly evidence of an inflated course grade). The following pages show the average grade inflation across grade levels and by district.

Math and English Language Arts Grade Inflation Analysis

Exhibit 1 on page 3 shows the percentage of students in 3rd through 8th grades in the districts reporting that received an A or B end-of-course Math grade in the 2022-2023 school year that did not test proficient or advanced on the 2022-2023 school year Mississippi state test.

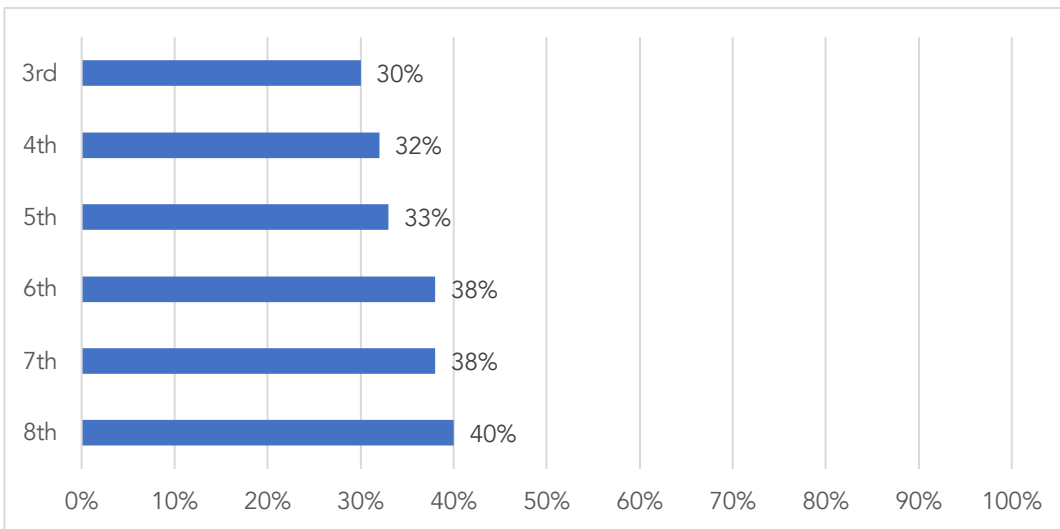
Exhibit 1: Math A and B Inflation Percentage by Grade



Note: Data were not reported for the following district: Oxford for 3rd through 5th grade.

Exhibit 2 on page 4 shows the percentage of students in 3rd through 8th grades in the districts reporting that received an A or B end-of-course ELA grade in the 2022-2023 school year that did not test proficient or advanced on the 2022-2023 school year Mississippi state test.

Exhibit 2: ELA A and B Inflation Percentage by Grade

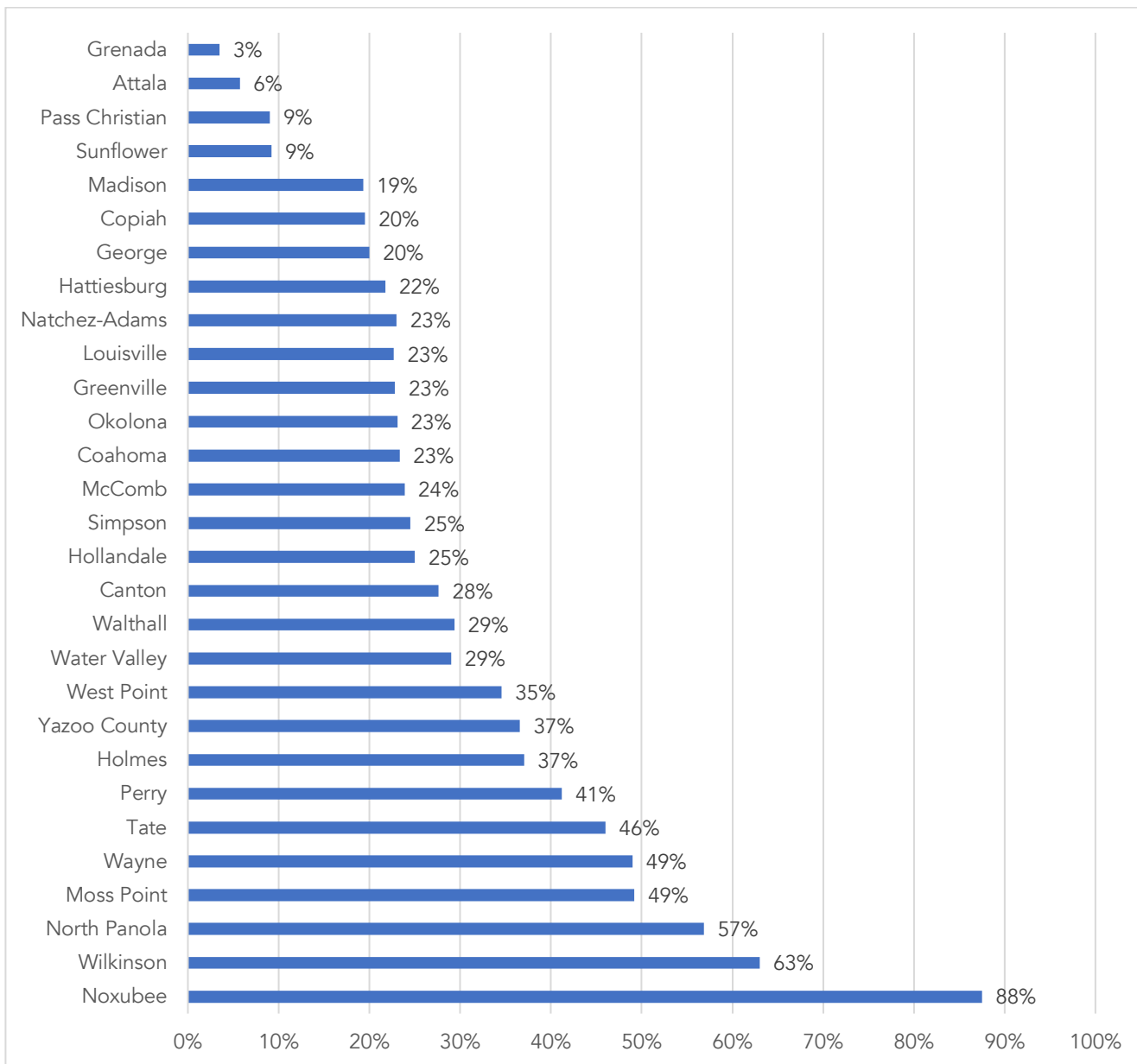


Note: Data were not reported for the following district: Oxford for 3rd through 5th grade.

Math Grade Inflation Analysis by District

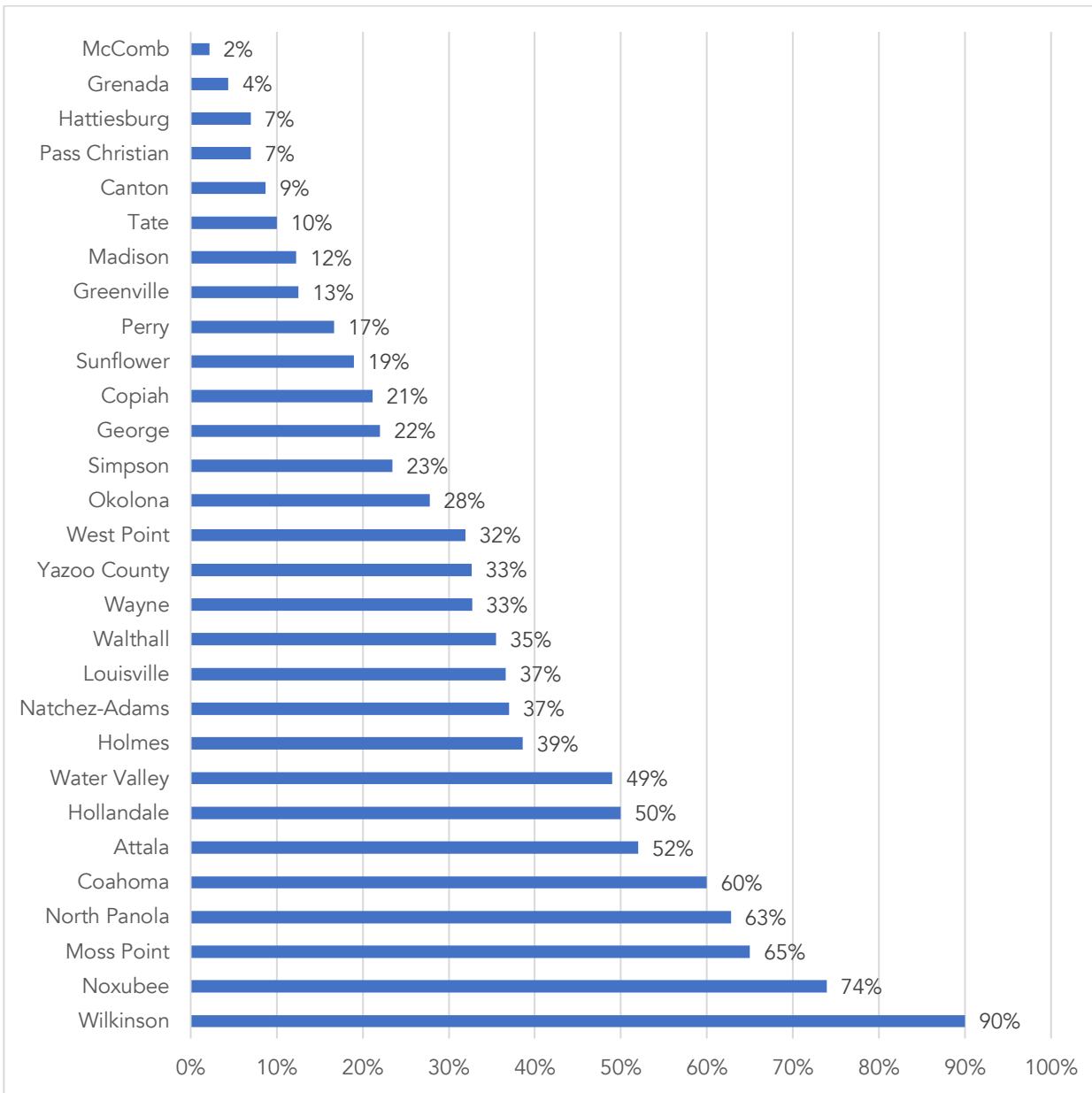
Exhibits 3 through 8 on pages 5 through 10 show the percentage of students in 3rd through 8th grades by district and by grade in the districts reporting that received an A or B end-of-course grade in the 2022-2023 school year that did not test proficient or advanced on the 2022-2023 school year Mississippi state test. Oxford did not provide data for the 3rd through 5th Math grade inflation analysis.

Exhibit 3: 3rd Grade Math A and B Inflation Percentage



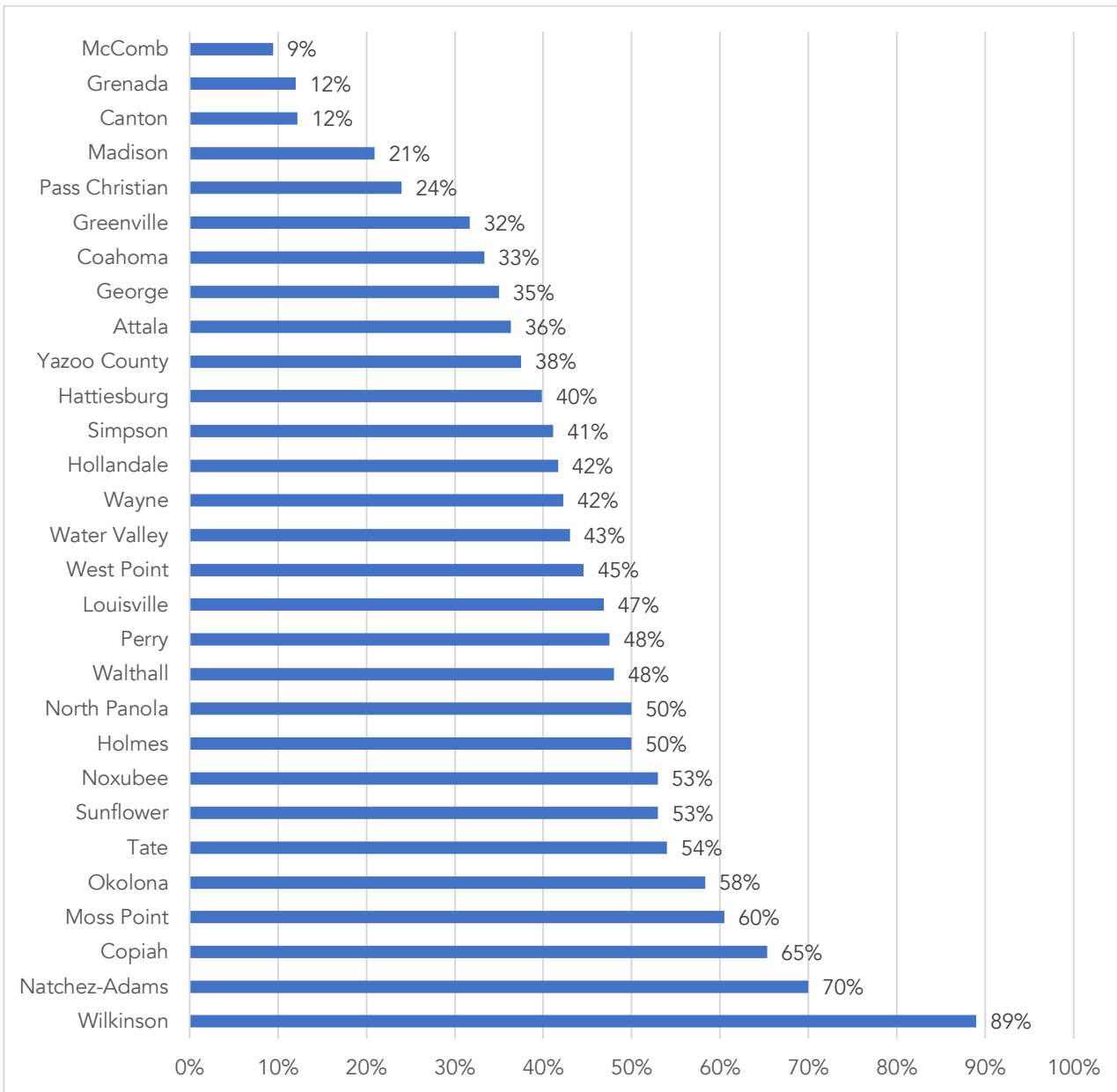
Note: Data were not reported for the following district: Oxford.

Exhibit 4: 4th Grade Math A and B Inflation Percentage



Note: Data were not reported for the following district: Oxford.

Exhibit 5: 5th Grade Math A and B Inflation Percentage



Note: Data were not reported for the following district: Oxford.

Exhibit 6: 6th Grade Math A and B Inflation Percentage

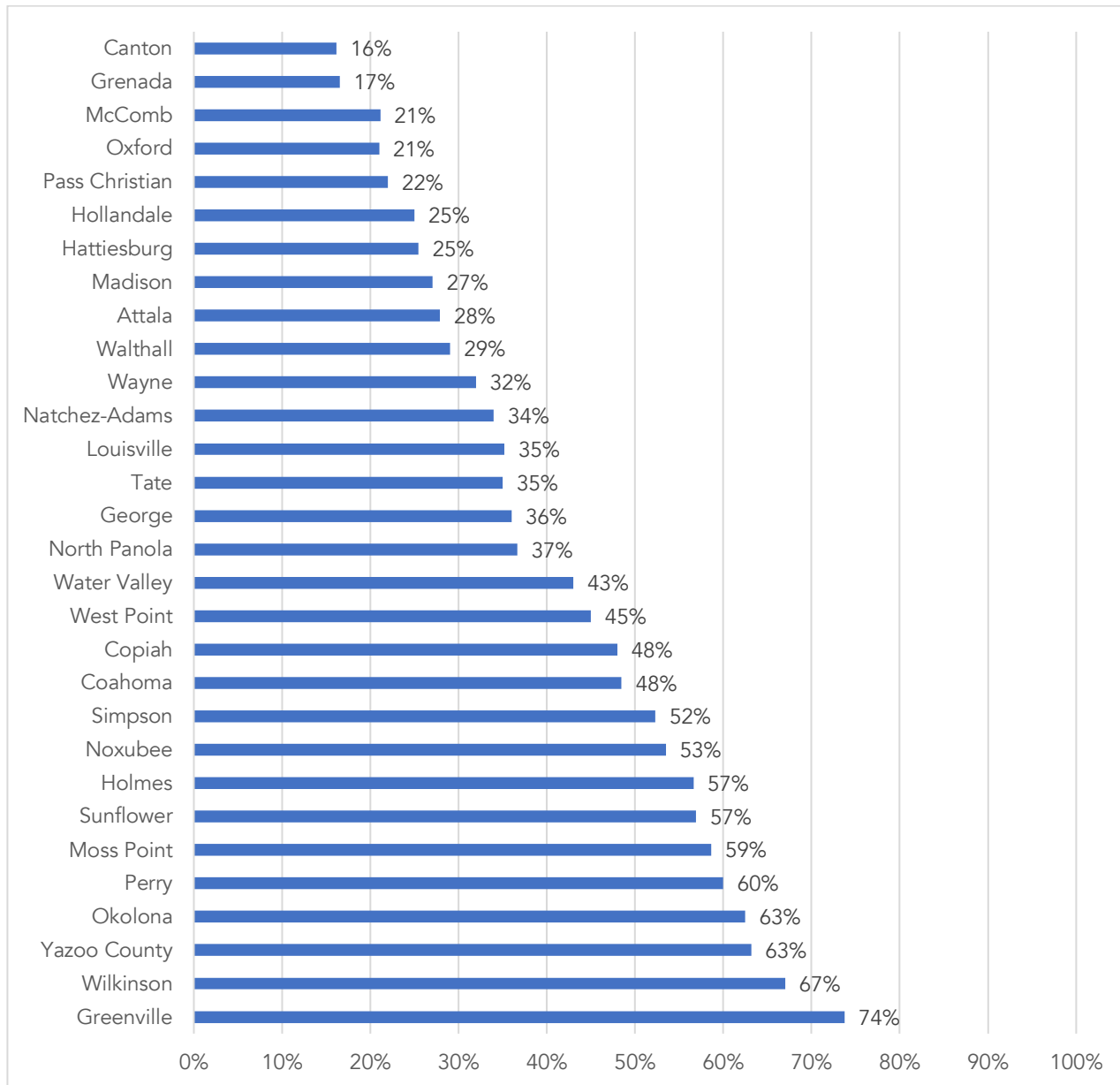


Exhibit 7: 7th Grade Math A and B Inflation Percentage

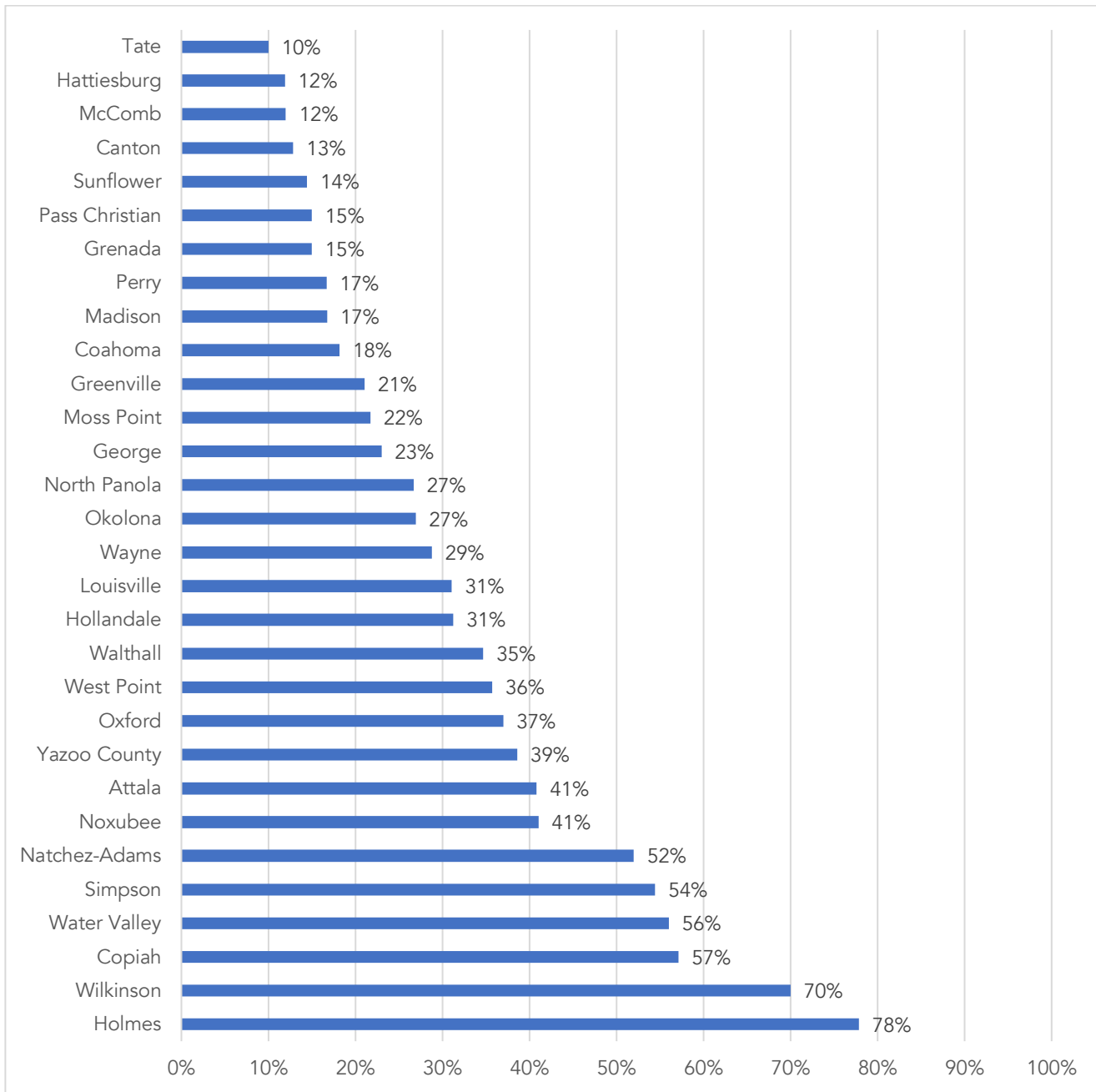
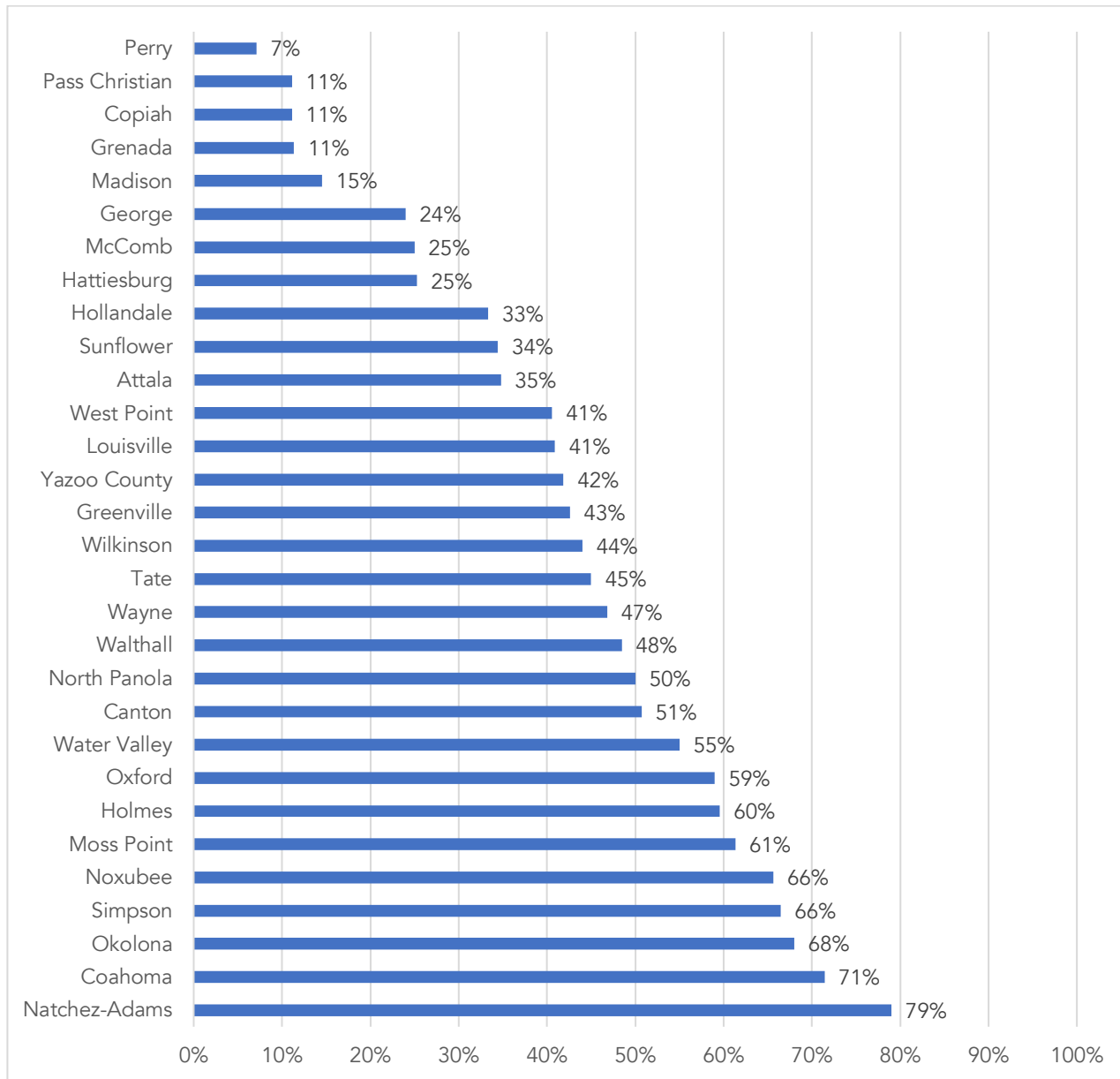


Exhibit 8: 8th Grade Math A and B Inflation Percentage

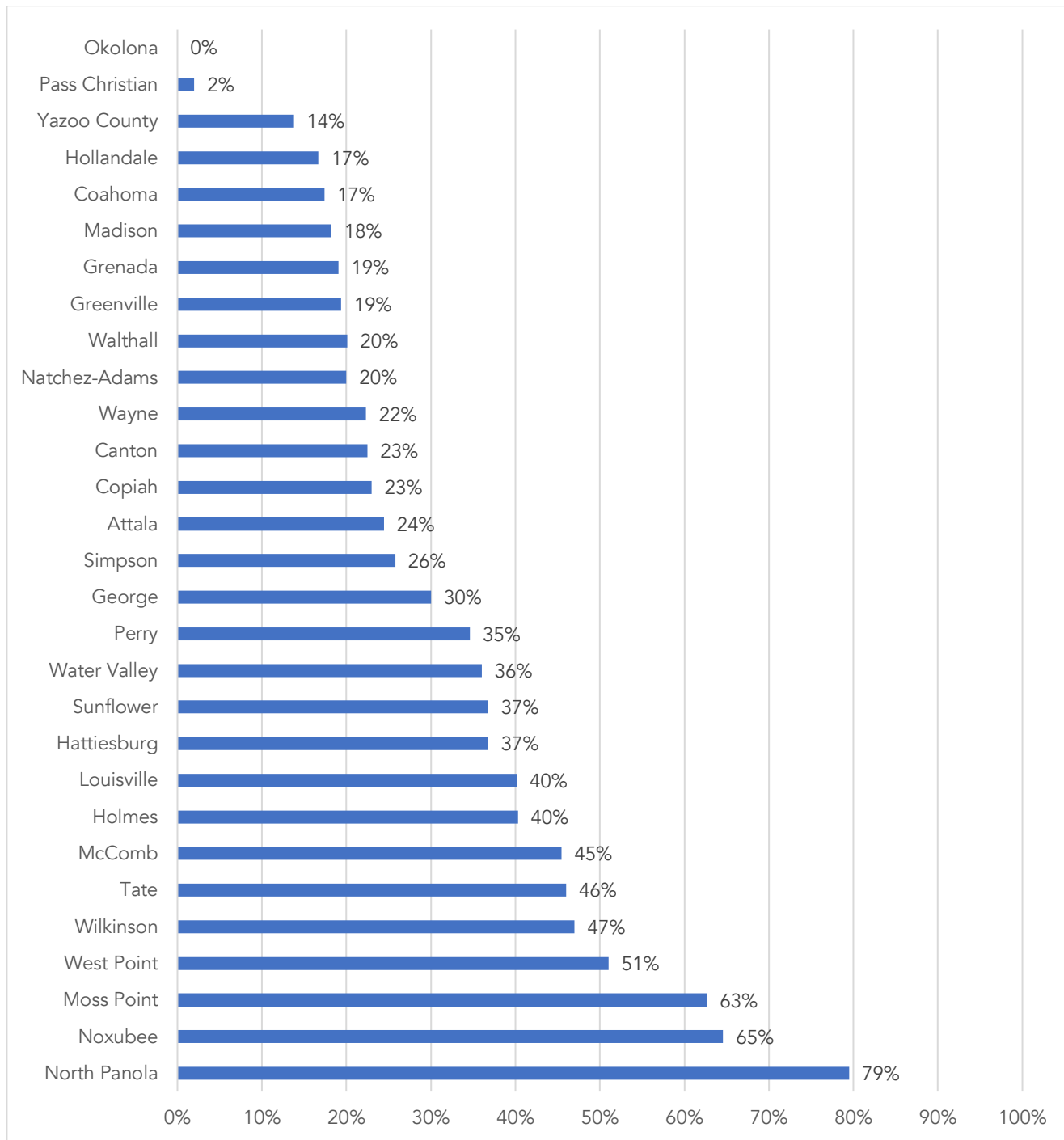


English Language Arts (ELA) Grade Inflation Analysis by District

Exhibits 9 through 14 on pages 11 through 16 show the percentage of students in 3rd through 8th grades by district and by grade in the districts reporting that received an A or B end-of-course grade in the 2022-2023 school year that did not test proficient or advanced on the 2022-2023 school year Mississippi state test.

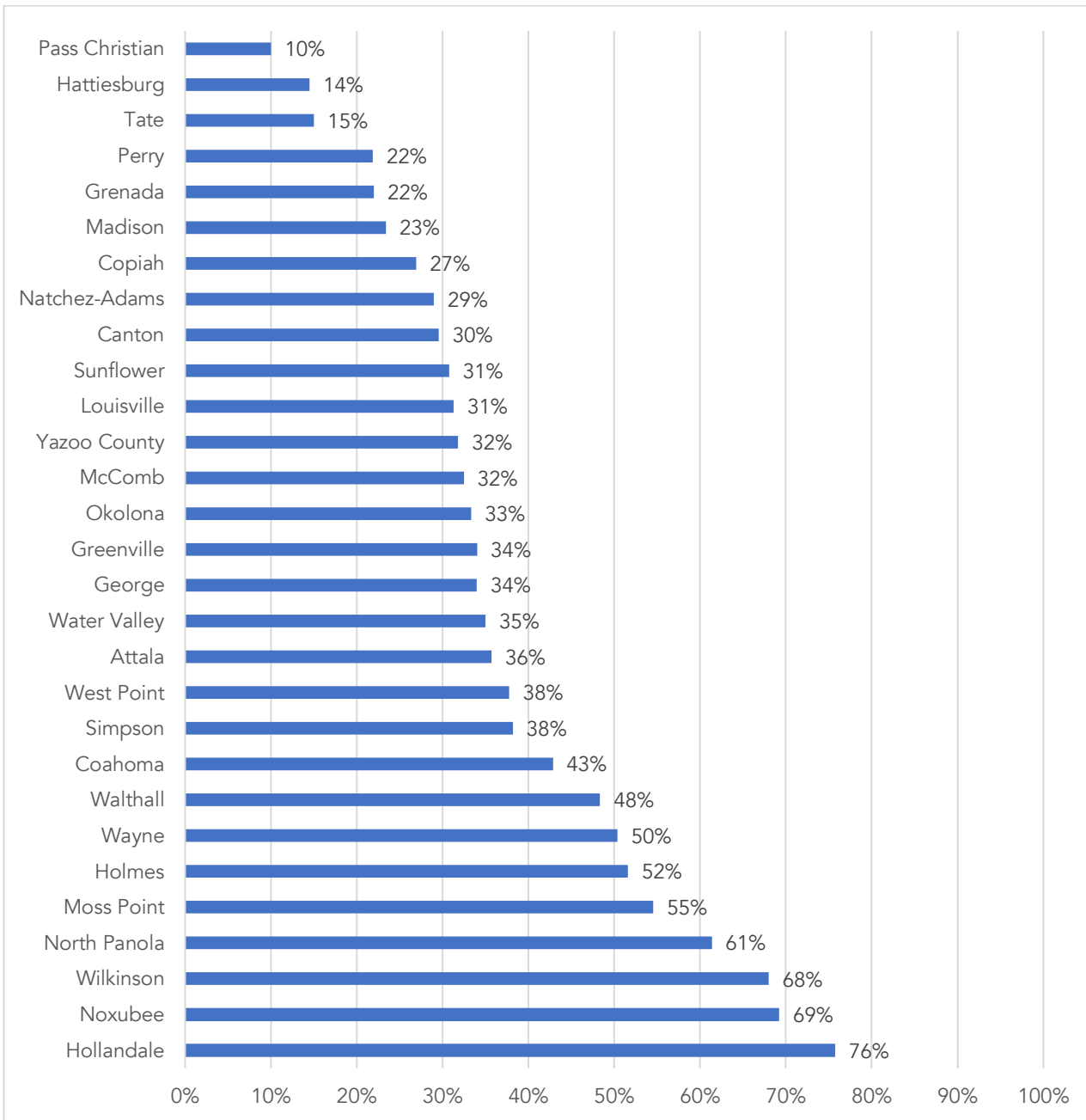
Note: The Oxford district did not provide data for the 3rd through 5th grade ELA grade inflation analysis.

Exhibit 9: 3rd Grade ELA A and B Inflation Percentage



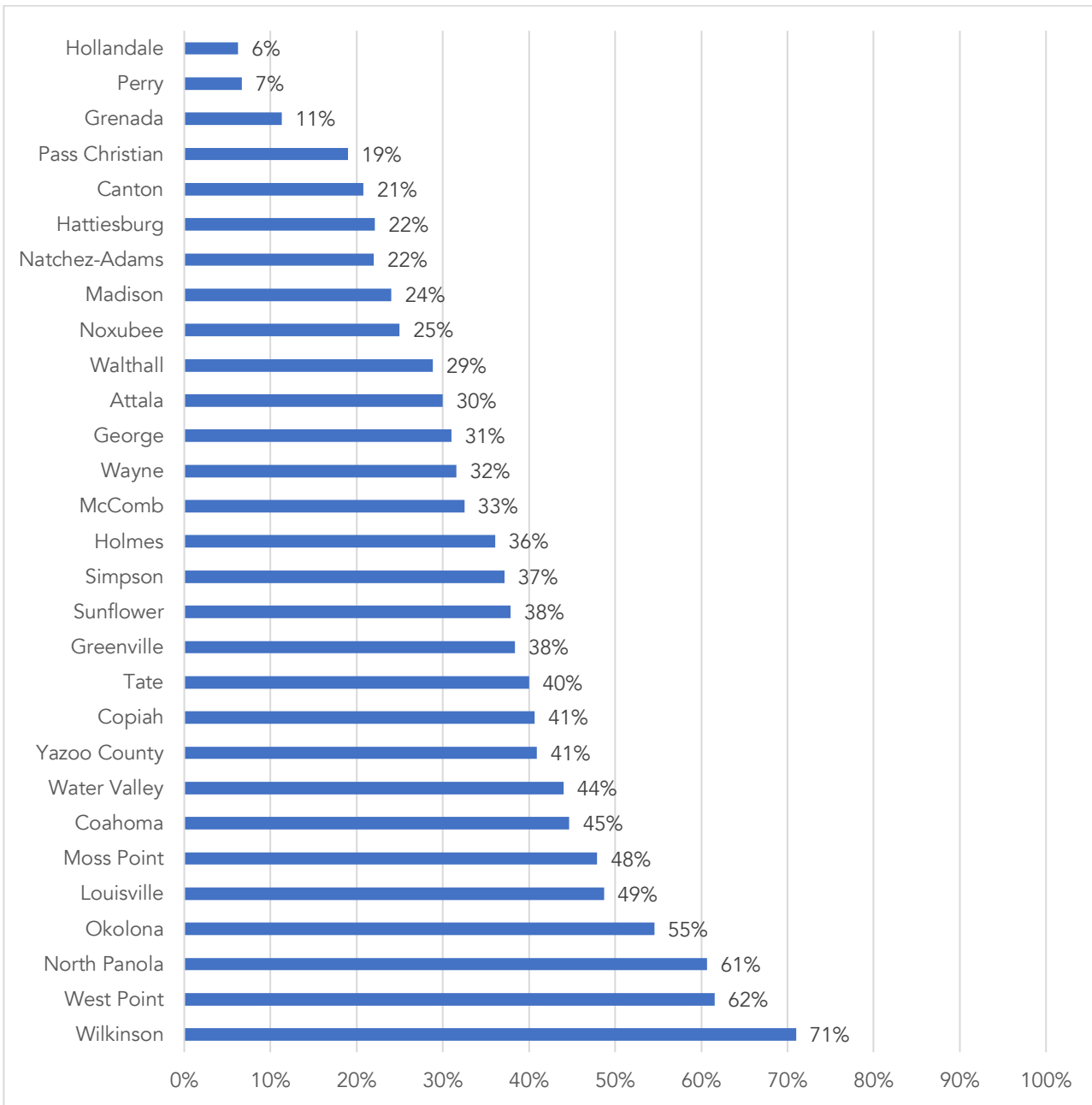
Note: Data were not reported for the following district: Oxford.

Exhibit 10: 4th Grade ELA A and B Inflation Percentage



Note: Data were not reported or were not available for the following district: Oxford.

Exhibit 11: 5th Grade ELA A and B Inflation Percentage



Note: Data were not reported or were not available for the following district: Oxford.

Exhibit 12: 6th Grade ELA A and B Inflation Percentage

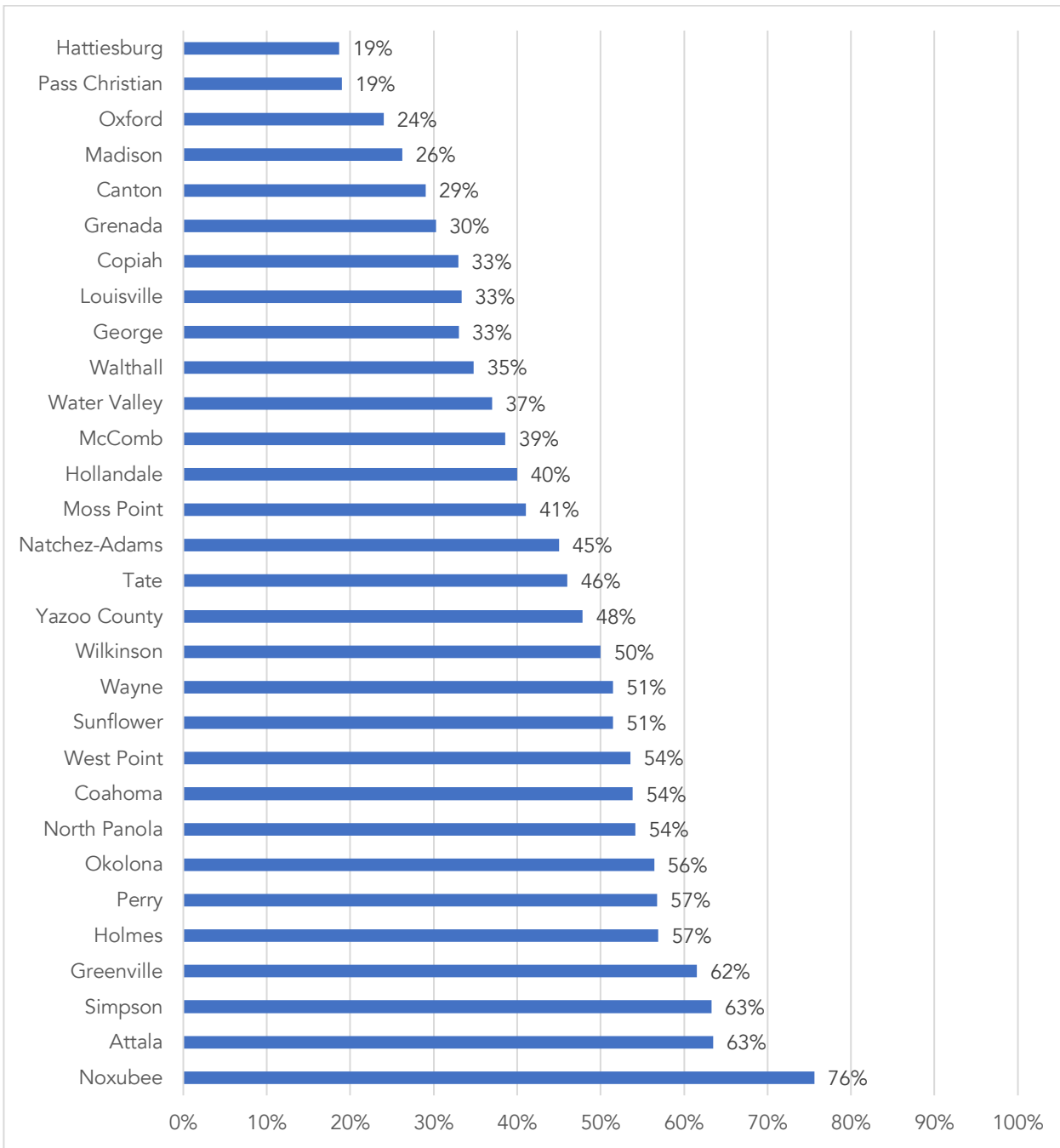


Exhibit 13: 7th Grade ELA A and B Inflation Percentage

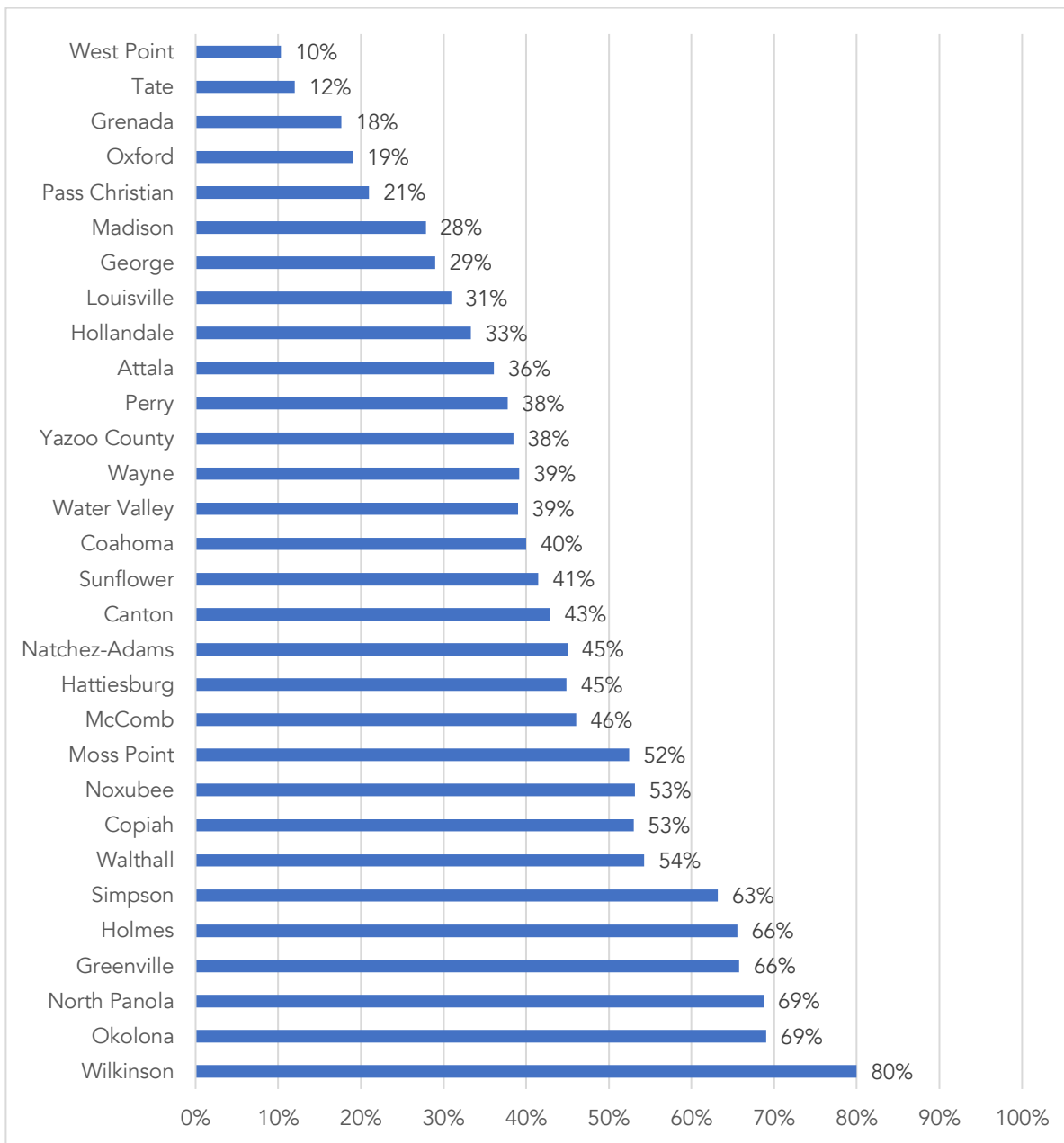
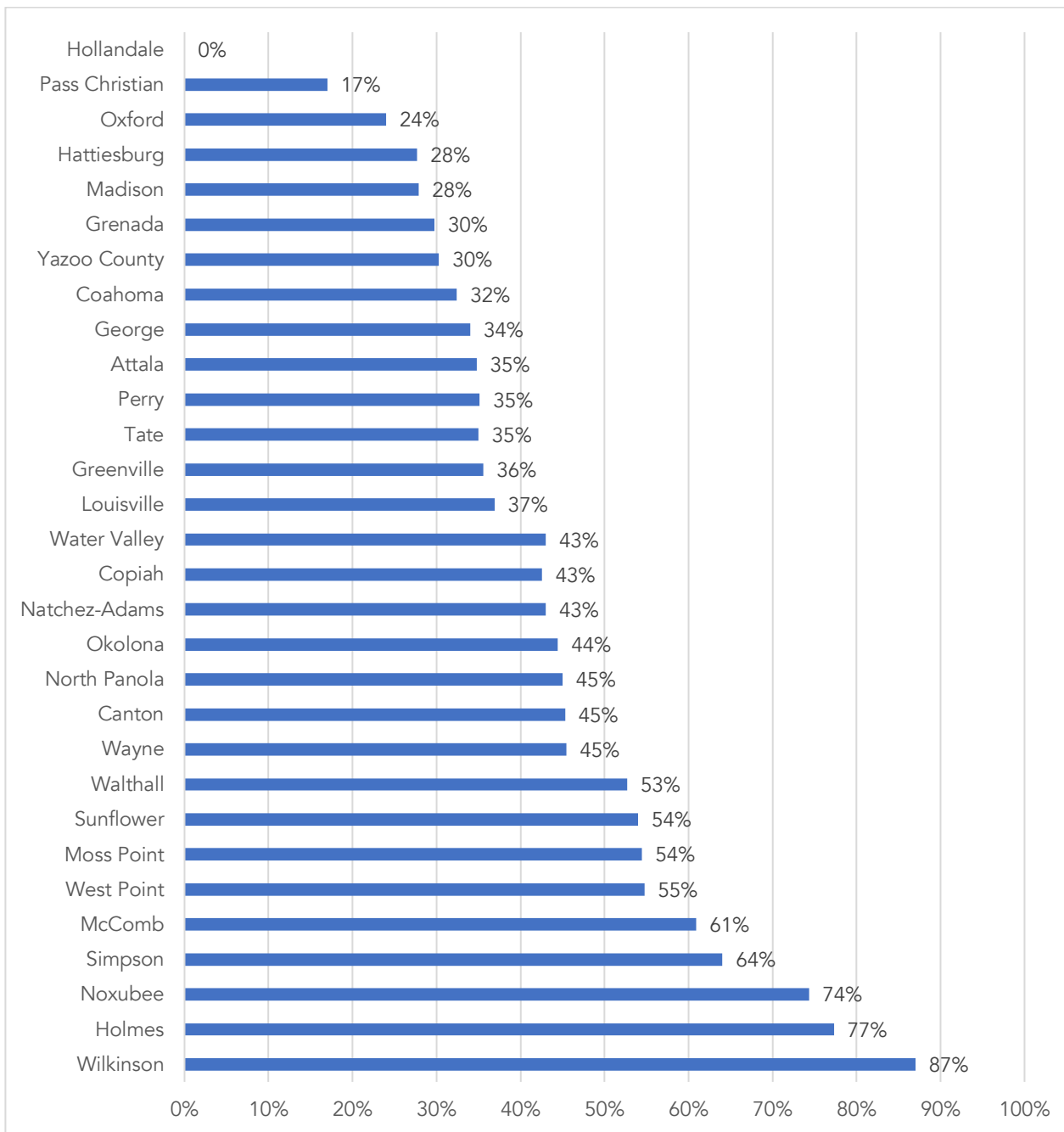


Exhibit 14: 8th Grade ELA A and B Inflation Percentage



Recommendations to Address Grade Inflation

While some level of inflation is to be expected, districts with greater than 25% inflation in each grade level should conduct a systemic review of grading practices. The majority of districts in the cohort could improve communication between educators, parents, and students by implementing the following recommendations:

1. **Annual Review:** Implement an annual review process to identify, track, and manage grade inflation each year.
2. **Year over Year Analysis:** Conduct year over year analysis to monitor whether corrective actions are being implemented correctly.
3. **Rigor and Alignment:** Review the level of rigor and alignment of assignments and assessments in grade levels presenting high inflation.
4. **Grade Book Weightings:** Review grade book weightings to determine which components are causing grade inflation. Grade book weightings define the “weights” of various types of graded activities (e.g., homework, classroom assignments, tests, midterms, finals).
5. **Graded Items:** Review graded items in target grade levels to assess whether there are not enough or too many graded items.
6. **Communication Plan:** Develop a communication plan to communicate grade inflation findings to principals and educators.
7. **Corrective Actions and Monitoring:** Identify corrective actions for schools to implement and monitor progress each year.

Mastery Decline

School districts use benchmark assessments during a school year to monitor students' mastery of a subject. *Mastery decline* is evidenced when a student scores lower on a benchmark assessment at the end of the school year than at the beginning of the school year, even if the decline is one point. Furthermore, mastery decline can occur and the student still test proficient in a subject area. Mastery decline negatively impacts a student's performance and confidence, creates challenges and additional expenses for school districts in addressing such, leads to higher dropout rates, and reduces a student's preparedness for college and career entry. For the 2022-2023 school year, approximately one-third of students in grades 3rd through 8th in the districts reviewed demonstrated mastery decline in Math and English Language Arts.

Academic standards outline what content a student should master in a given period. School districts monitor the growth or decline in students' mastery of course material throughout the school year. This is accomplished using a formative or benchmark assessment given 3-4 times a year. For example, a 'Pre Test' may be given at the start of the year to establish a baseline level for the student, a 'Mid Test' to assess mid-year progress, and a 'Post Test' at the conclusion of the year to determine where a student ended the year. While a variety of reasons may account for growth or decline in standards mastery, the following are a few examples of situations that can cause decline in standards mastery:

- summer break (also known as summer slide);
- absenteeism;
- ineffective instructional practices;
- misaligned resources;
- ineffective processes to identify, track, and mitigate students with decline in mastery; or,
- course scheduling.

The focus of this analysis was to help districts identify intra-year decline in mastery, pinpoint the degree and location of mastery decline, and to empower districts with information to develop strategies to mitigate and recover from this decline.

Ramifications of Mastery Decline

The impact of mastery decline is felt at the student, school, district, and community level. The impact of mastery decline can be seen in the following areas:

- **Student level:** Mastery decline impacts students' performance and confidence. When decline in mastery compounds over time, it is difficult for students to recover year over year.
- **School and district levels:** Chronic decline in mastery creates challenges for school administration as students move from grade level to grade level. The compounding loss is very difficult for educators and administrators to overcome.
- **Increased costs:** Districts are forced to invest in additional intervention resources and personnel to support students.
- **Increased dropout rates:** Longitudinal decline in mastery is associated with higher dropout rates.
- **Reduction in college and career readiness:** Mastery decline causes students to be ill prepared for college and career entry.

These issues make it imperative for districts to strategically implement annual review processes to ensure that decline in mastery is mitigated as much as possible. A well-functioning process will provide for the following:

- assignment of an individual responsible for managing and monitoring decline in mastery;
- maintaining a process or software application that automates the identification of mastery decline;
- production of reports at all levels: district overview, by grade level, by school, by classroom (it is imperative to get down to the classroom level to pinpoint exactly where decline of mastery is occurring so that appropriate support can be supplied);
- comparison of mastery decline findings longitudinally to determine whether it is acute or chronic for a given grade level, school, or classroom;
- administrative review by district leadership, including meetings to review findings and discuss mitigation strategies and corrective actions;
- review of previous mitigation strategies annually to identify what is working and what is not working; and,
- most importantly, identification of students suffering from decline in mastery as a cohort each year to ensure that they receive the proper support the following year to bridge the gap as quickly as possible.

Analysis

The following analysis uses district-provided formative/benchmark assessments given throughout the 2022-2023 school year to identify any decline in mastery in 3rd through 8th grades in the districts reporting. The analysis reviewed the percentage of students that declined from the first formative/benchmark assessment to the final formative/benchmark assessment. The analysis uses the district-provided raw scale score, percent correct, or equivalent metric to determine what percentage of students declined from the pre/first formative/benchmark assessment to the post/final formative/benchmark assessment.

There are two common types of formative/benchmark assessments:

Adaptive Assessment: Adaptive assessments are characterized by their ability to assess a student's starting point (on or off grade level) and ending point (on or off grade level). These assessments are useful to track how far a student has progressed from the start of the year to the end regardless of where the student started.

On Grade Level Benchmarking: On grade level benchmark assessments are characterized by their ability to assess a student's level of mastery based on current grade level content at the beginning of the year and again on current grade level content at the end of the year.

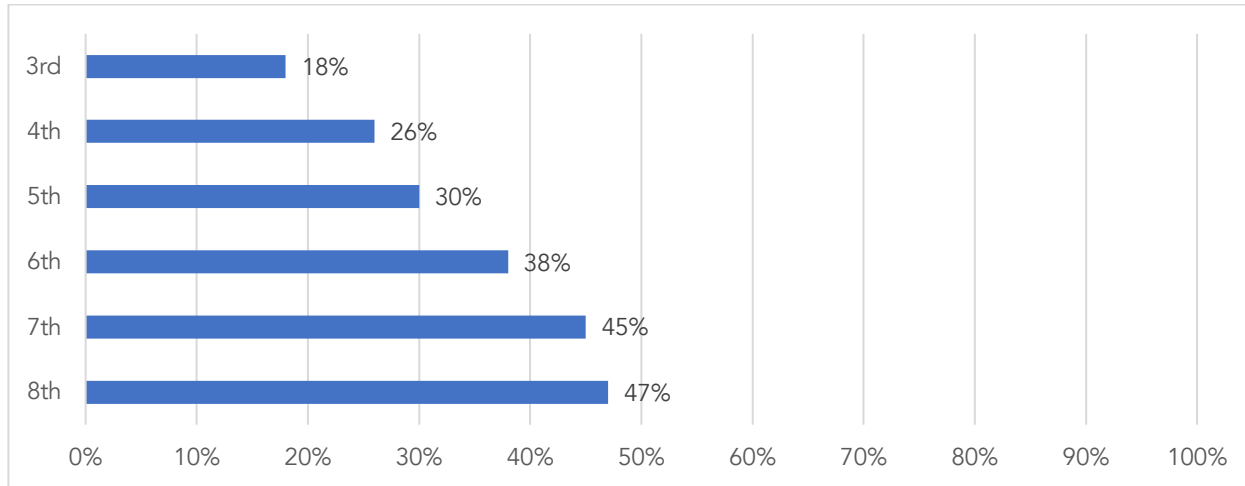
Note: Relative comparisons and conclusions across the two assessment types should be avoided. Each methodology assesses student growth or decline using two different methods.

Again, decline in mastery is defined as student performance that declined from the first assessment to the last assessment. This does not, however, reflect whether students fell from being proficient to being non-proficient. A student's mastery might decline from the start of the year to the end but not fall below the proficiency line.

Math and English Language Arts Mastery Decline Analysis

Exhibit 15 on page 20 shows the percentage of students in 3rd through 8th grade in the districts reporting that had a decline in mastery on the districts' 2022-2023 Math intra-year benchmark assessment.

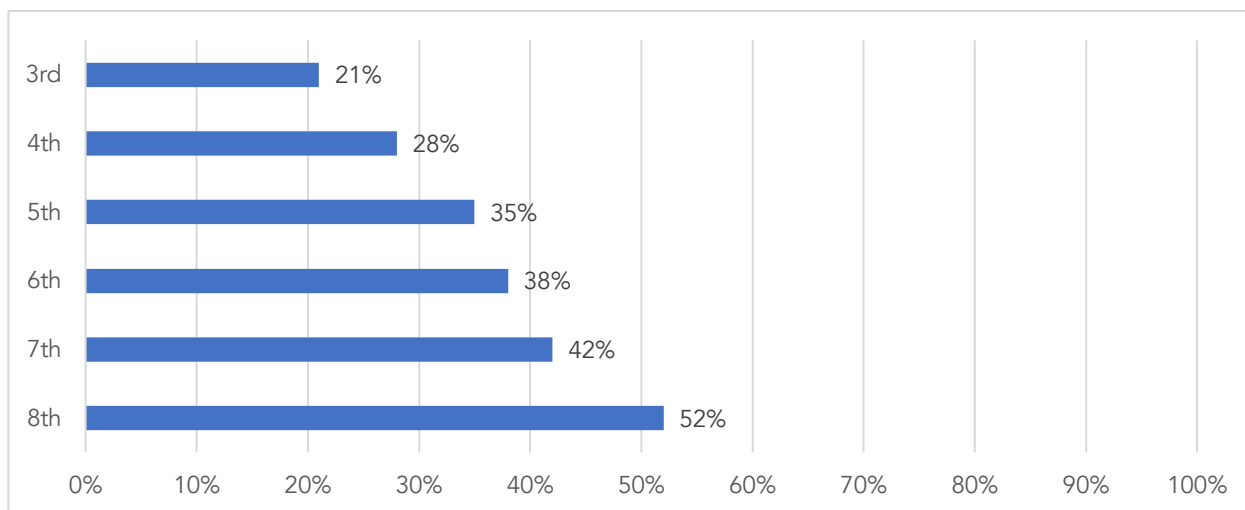
Exhibit 15: Percentage of Math Students with Mastery Decline by Grade



Note: Data were not reported or were not available for the following districts: Yazoo County (all grades), Simpson (3rd grade), Okolona (5th grade), Attala (7th and 8th grades), and McComb (7th and 8th grades).

Exhibit 16 on page 20 shows the percentage of students in 3rd through 8th grade in the districts reporting that had a decline in mastery on the districts' 2022-2023 ELA intra-year benchmark assessment.

Exhibit 16: Percentage of ELA Students with Mastery Decline by Grade

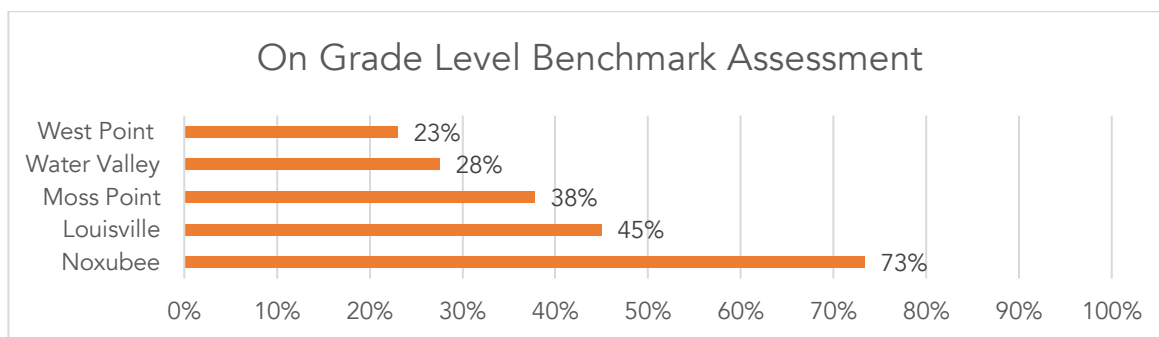
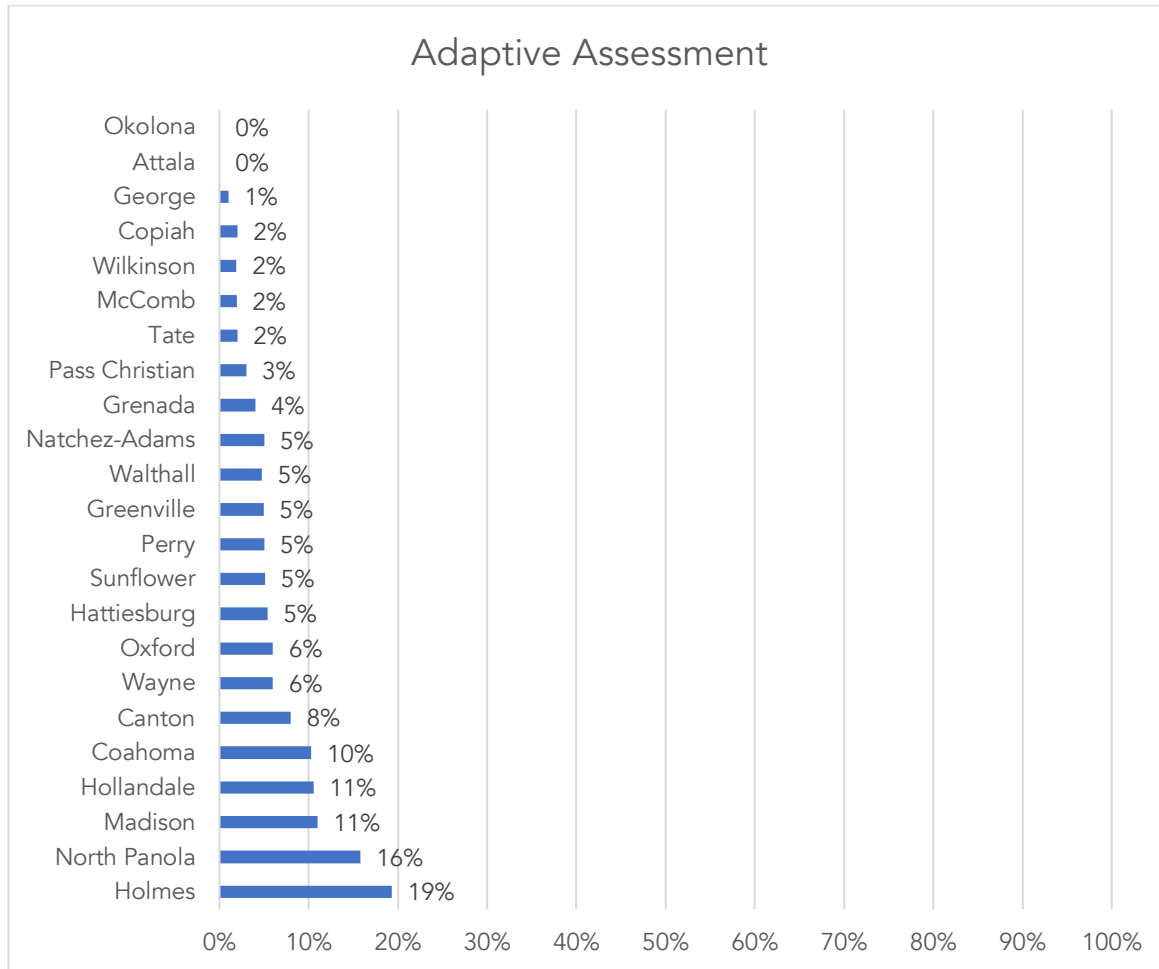


Note: Data were not reported or were not available for the following districts: Yazoo County (all grades), Simpson (3rd grade), Okolona (5th grade), Madison (6th grade), Attala (7th and 8th grades), Madison (7th and 8th grades), and McComb (7th and 8th grades).

Math Decline in Mastery by District

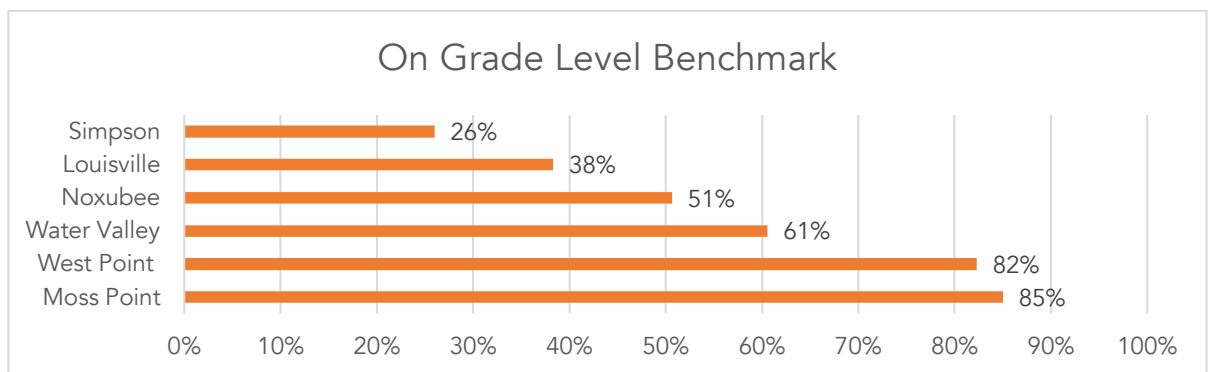
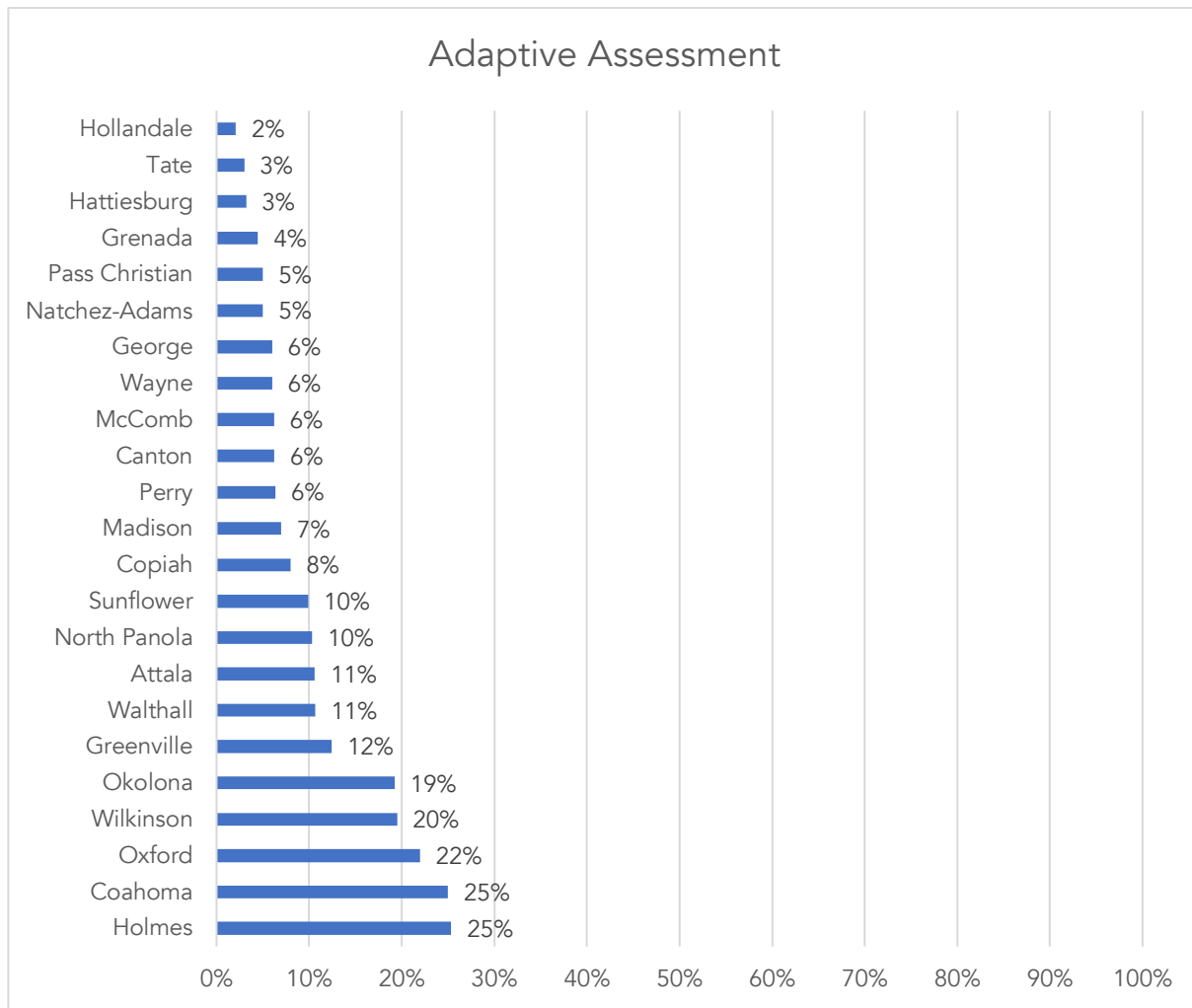
Exhibits 17 through 22 on pages 21 through 26 show the percentages of 3rd through 8th grade Math students in the districts reporting with a decline in mastery by grade level and by district during the 2022-2023 school year. Adaptive assessments are represented by blue bars and on grade level benchmark assessments are represented by orange bars.

Exhibit 17: Percentage of 3rd Grade Math Students with Mastery Decline by District



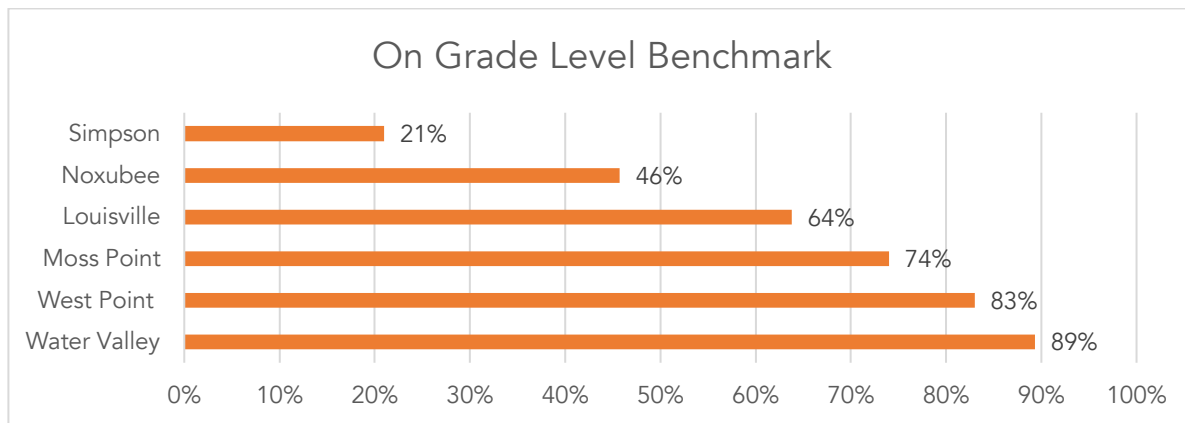
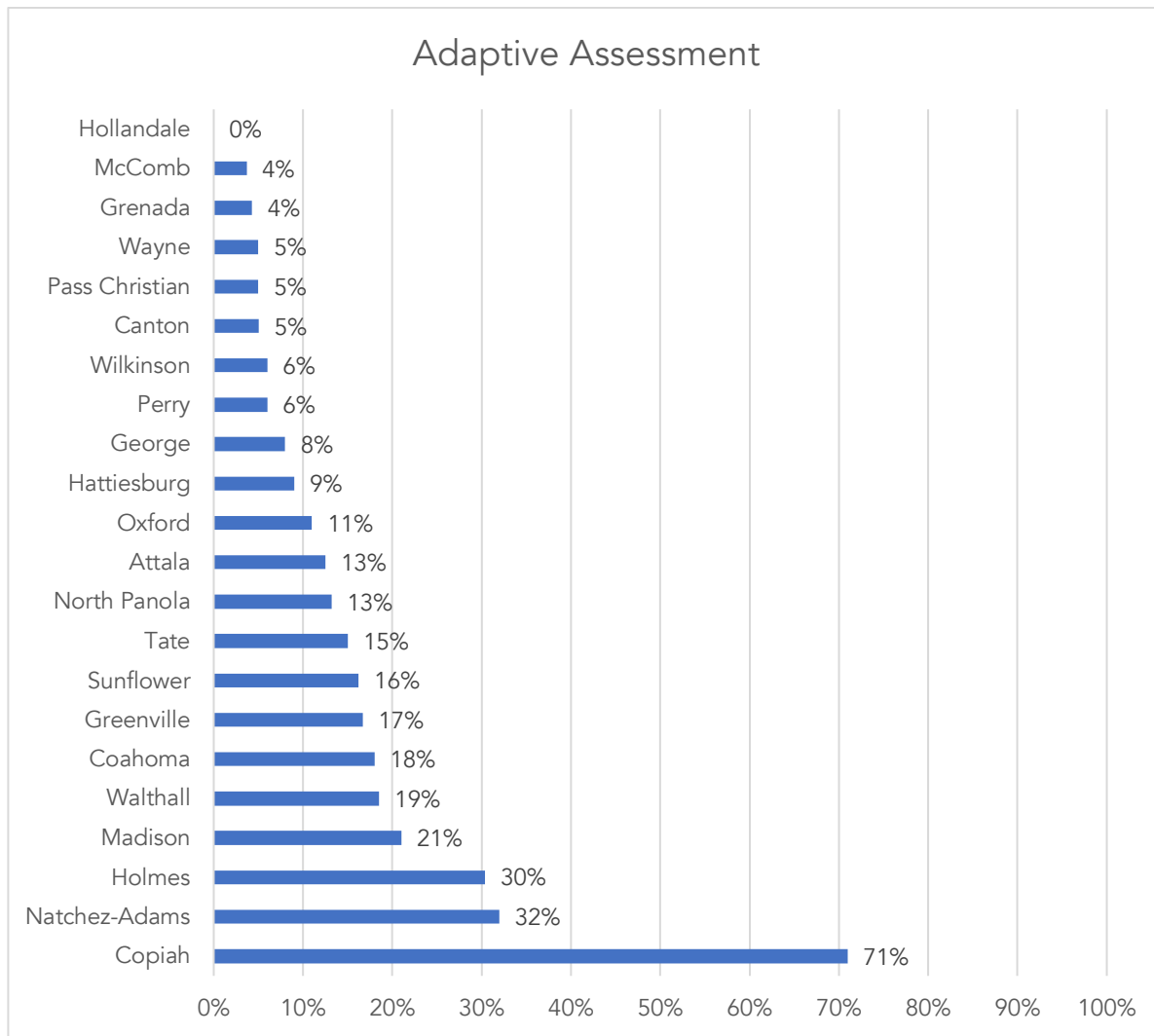
Note: Data were not reported or were not available for the following districts: Yazoo County and Simpson.

Exhibit 18: Percentage of 4th Grade Math Students with Mastery Decline by District



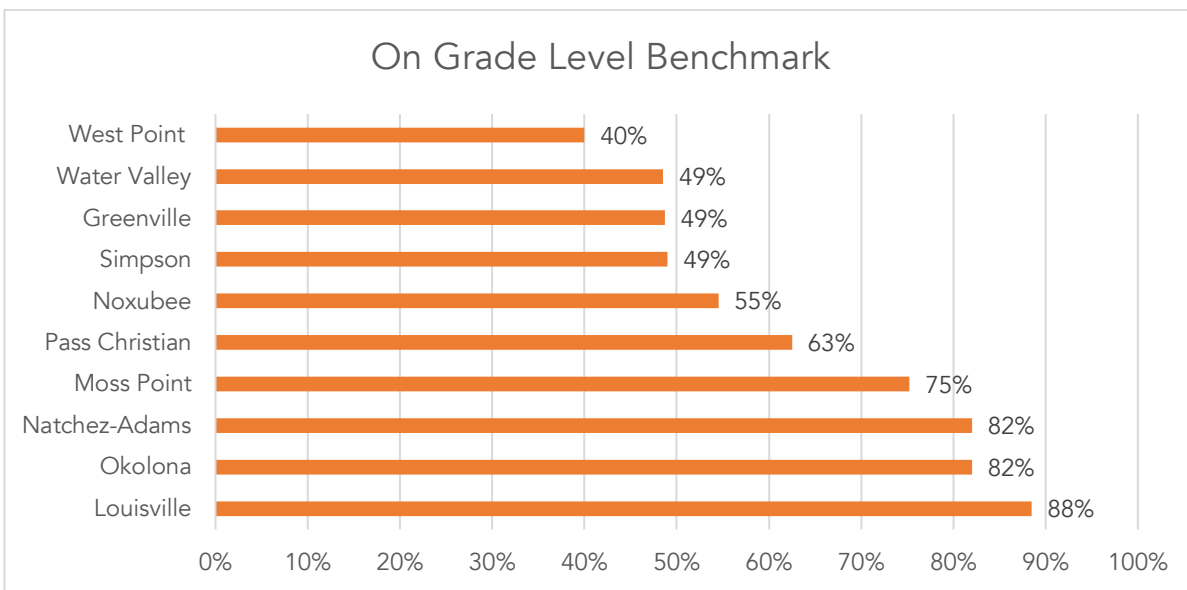
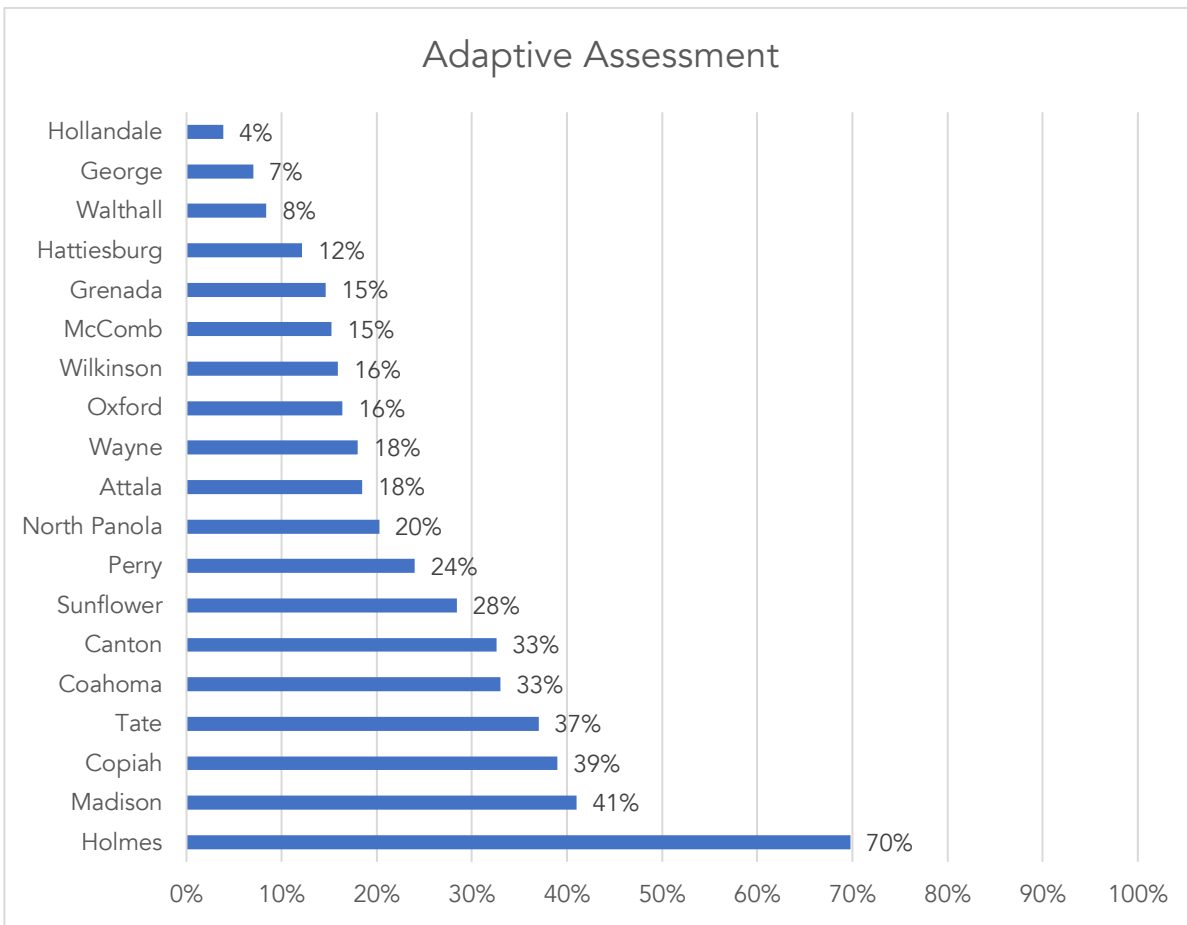
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 19: Percentage of 5th Grade Math Students with Mastery Decline by District



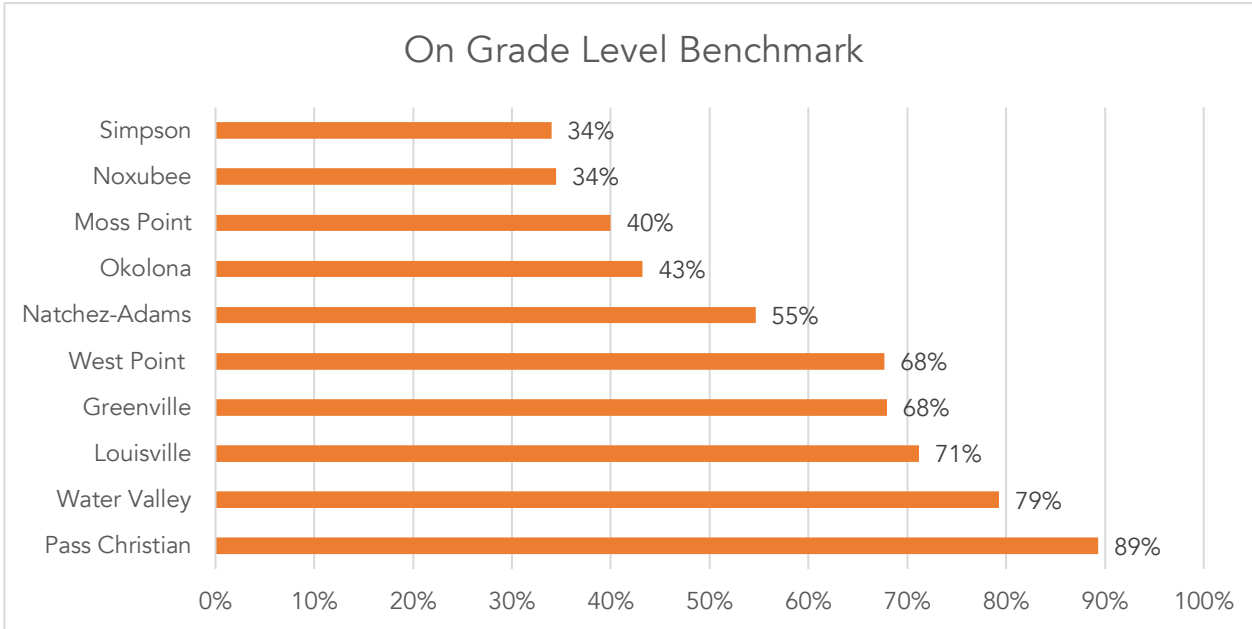
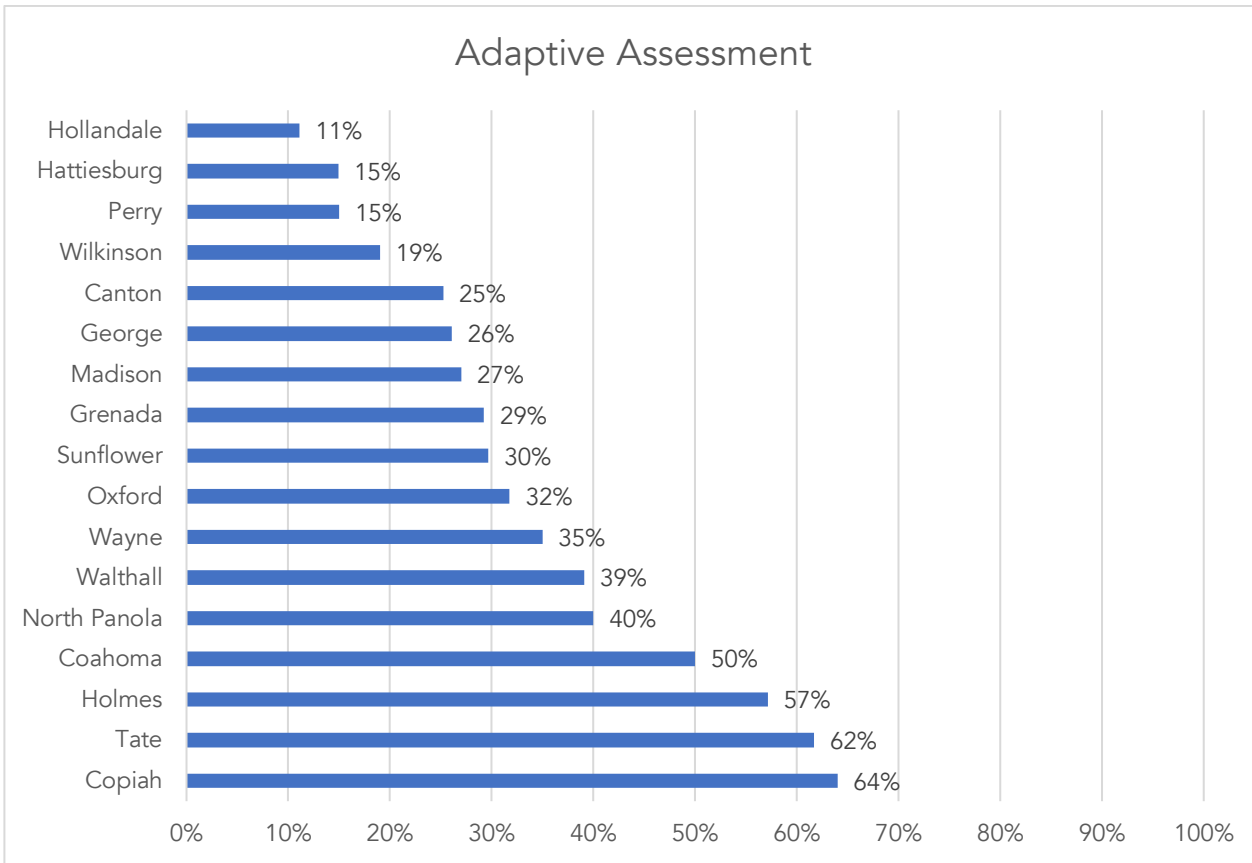
Note: Data were not reported or were not available for the following districts: Yazoo County and Okolona.

Exhibit 20: Percentage of 6th Grade Math Students with Mastery Decline by District



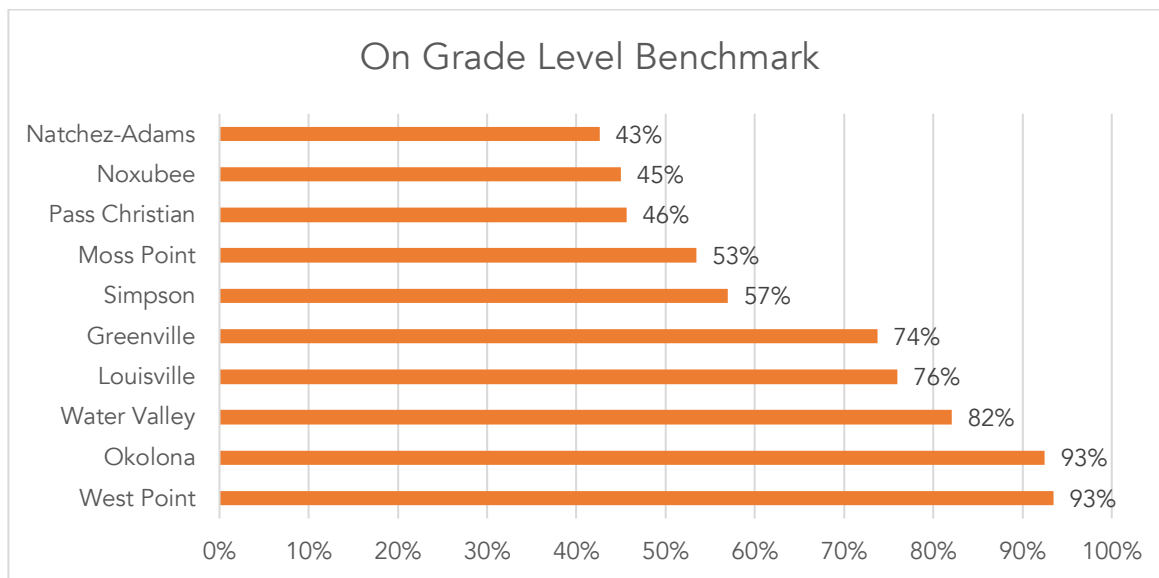
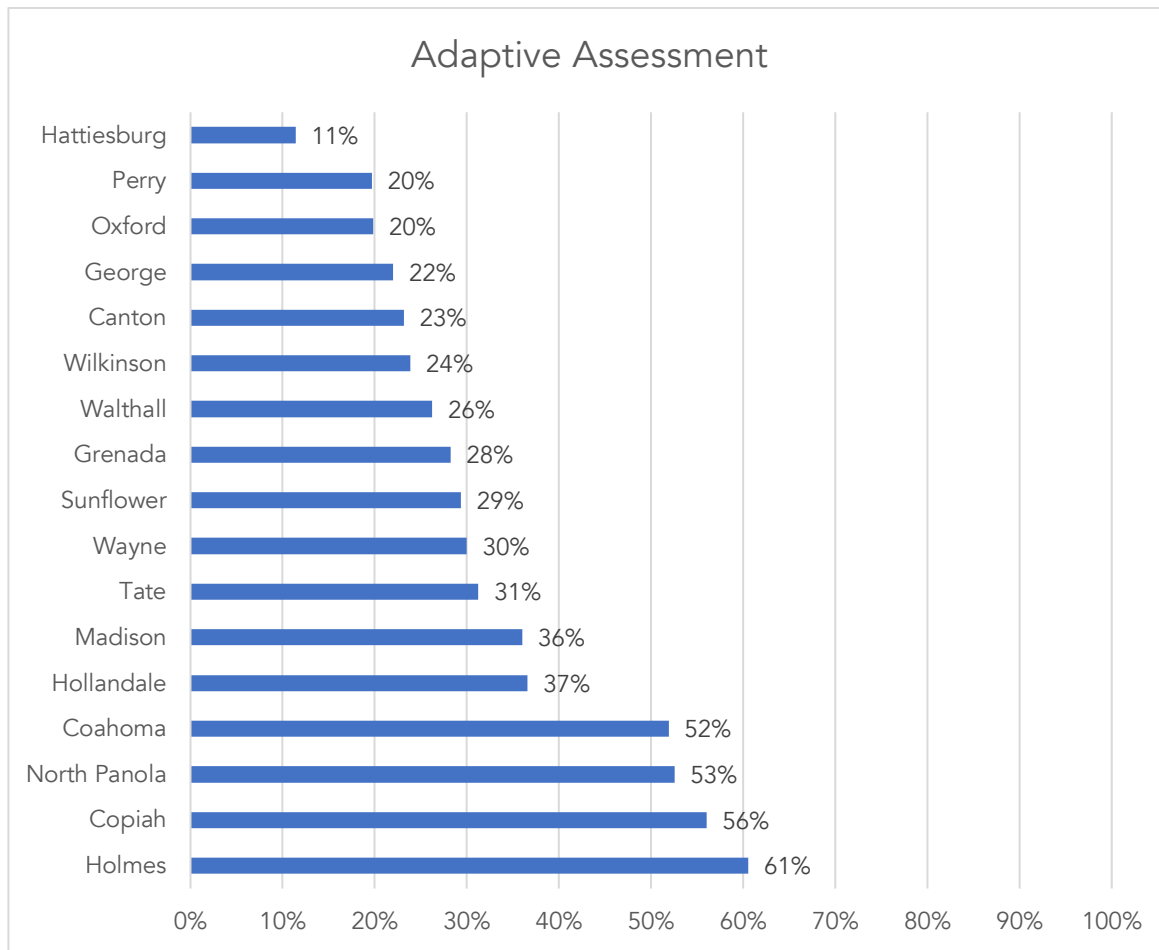
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 21: Percentage of 7th Grade Math Students with Mastery Decline by District



Note: Data were not reported or were not available for the following districts: Yazoo County, Attala, and McComb.

Exhibit 22: Percentage of 8th Grade Math Students with Mastery Decline by District

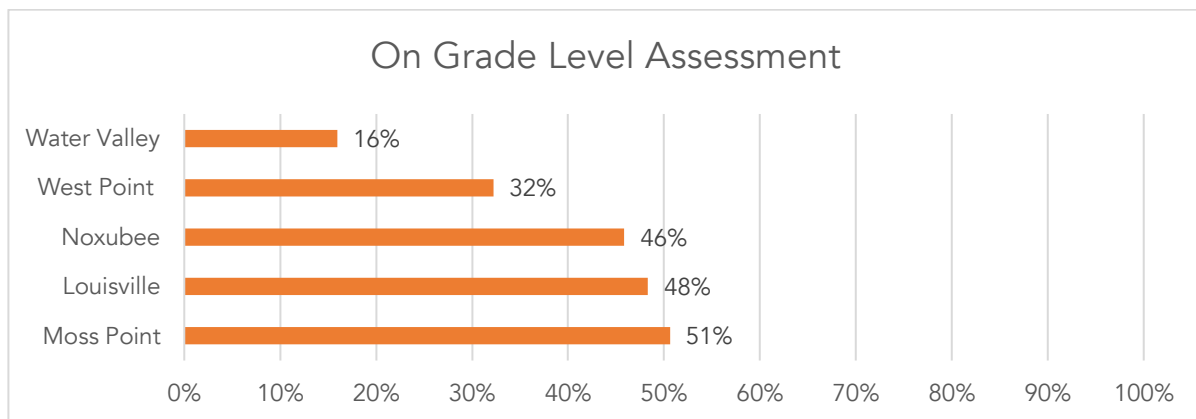
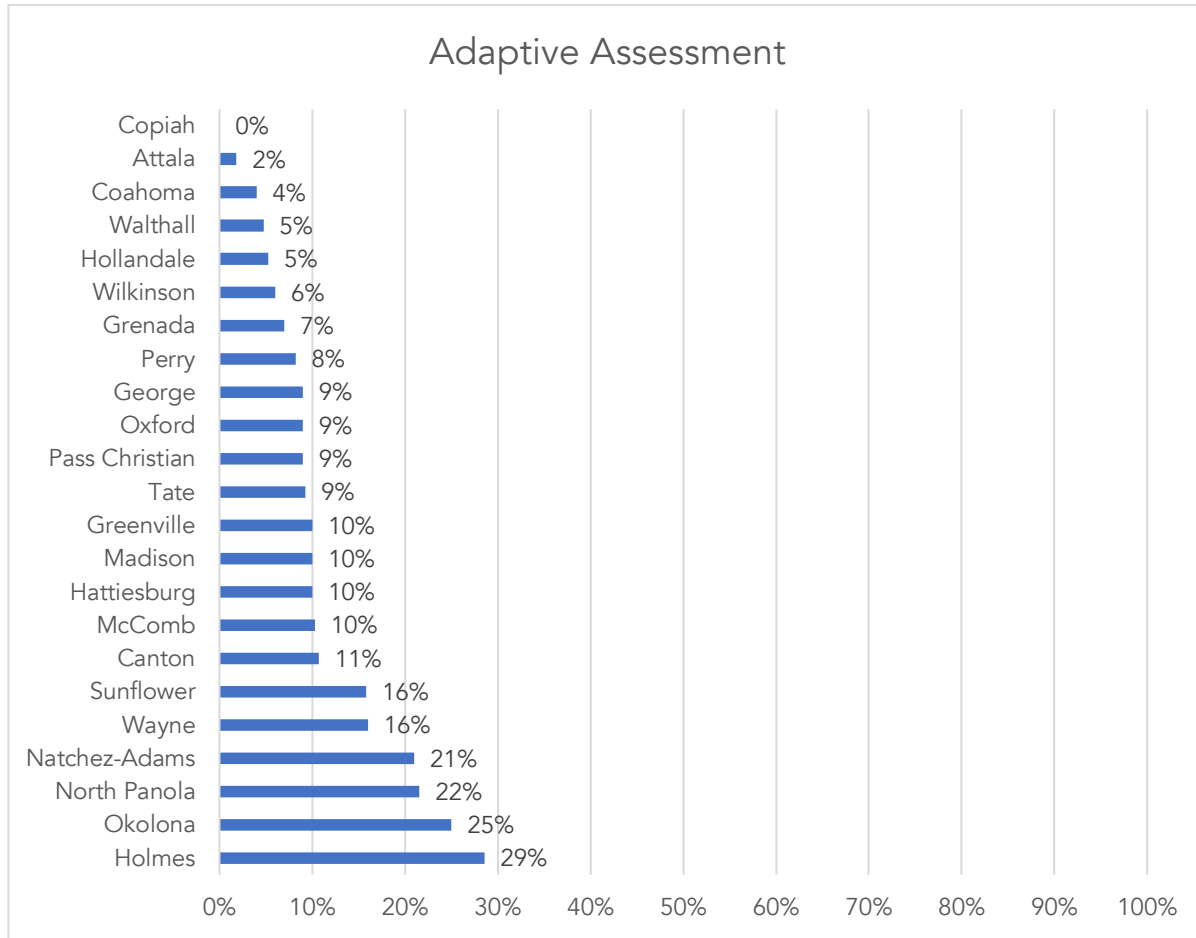


Note: Data were not reported or were not available for the following districts: Yazoo County, Attala, and McComb.

Analysis of ELA Decline in Mastery by District

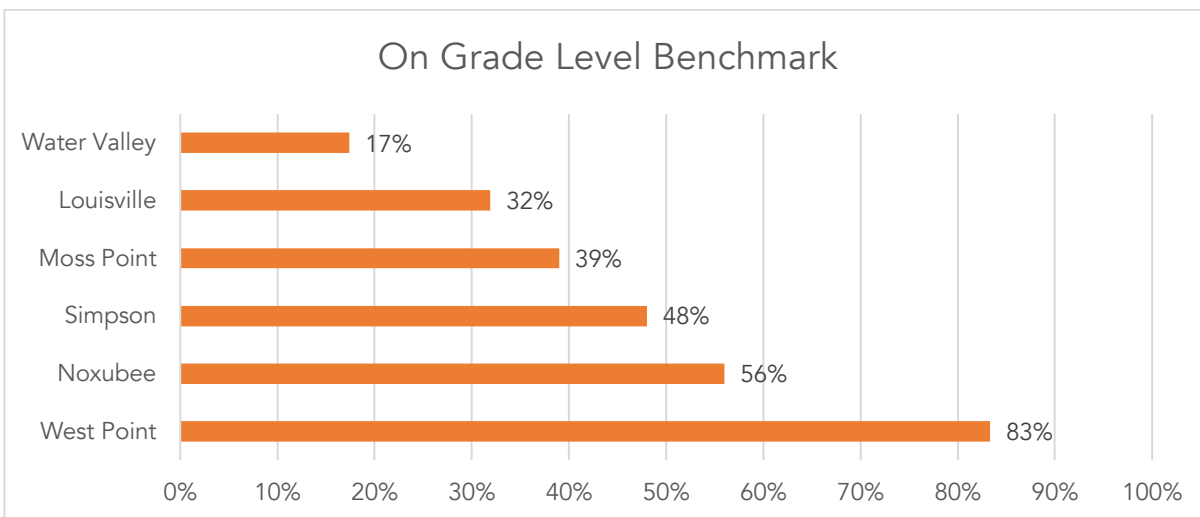
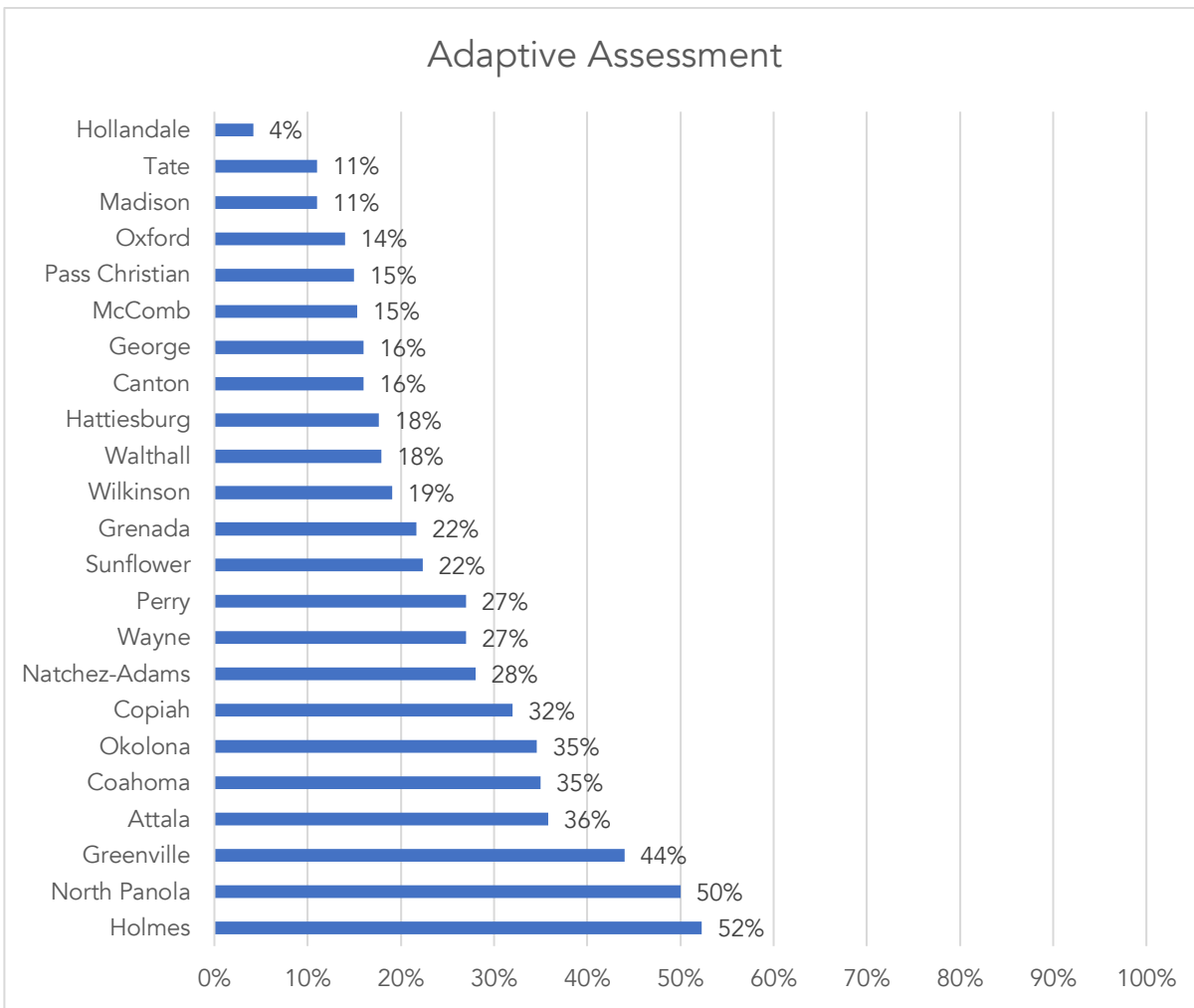
Exhibits 23 through 28 on pages 27 through 32 show the percentage of 3rd through 8th grade ELA students in the districts reporting with a decline in mastery by grade level and by district.

Exhibit 23: Percentage of 3rd Grade ELA Students with Mastery Decline by District



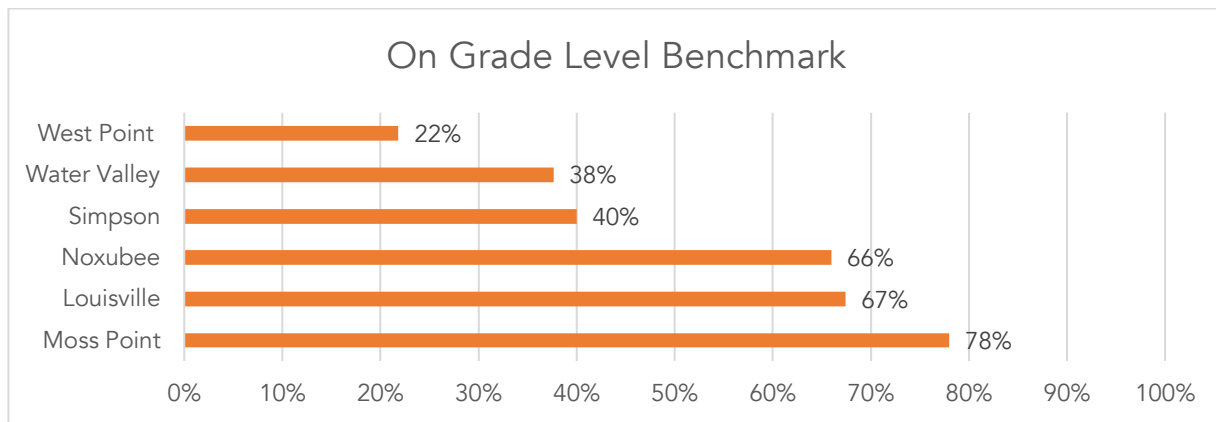
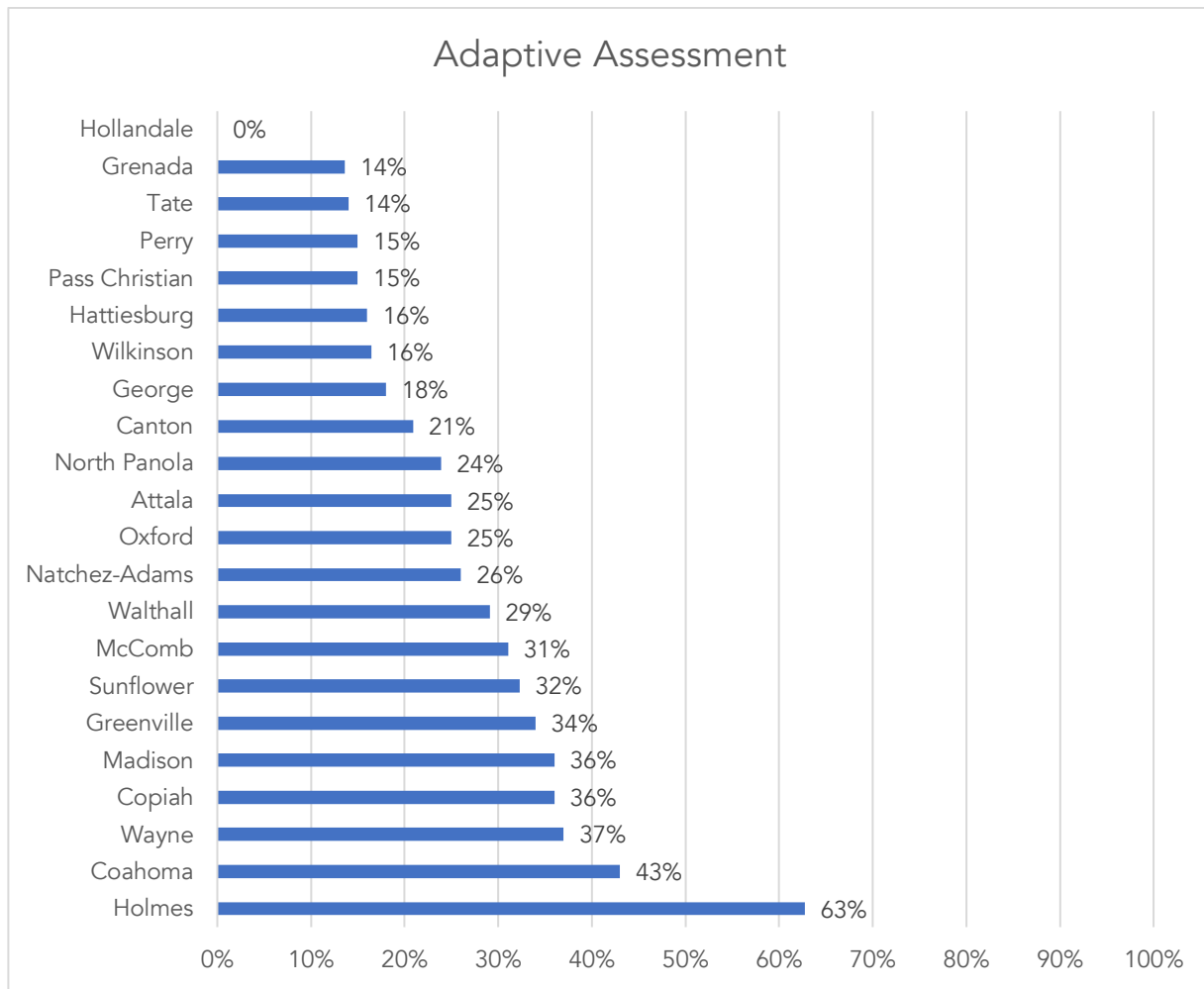
Note: Data were not reported or were not available for the following districts: Yazoo County and Simpson.

Exhibit 24: Percentage of 4th Grade ELA Students with Mastery Decline by District



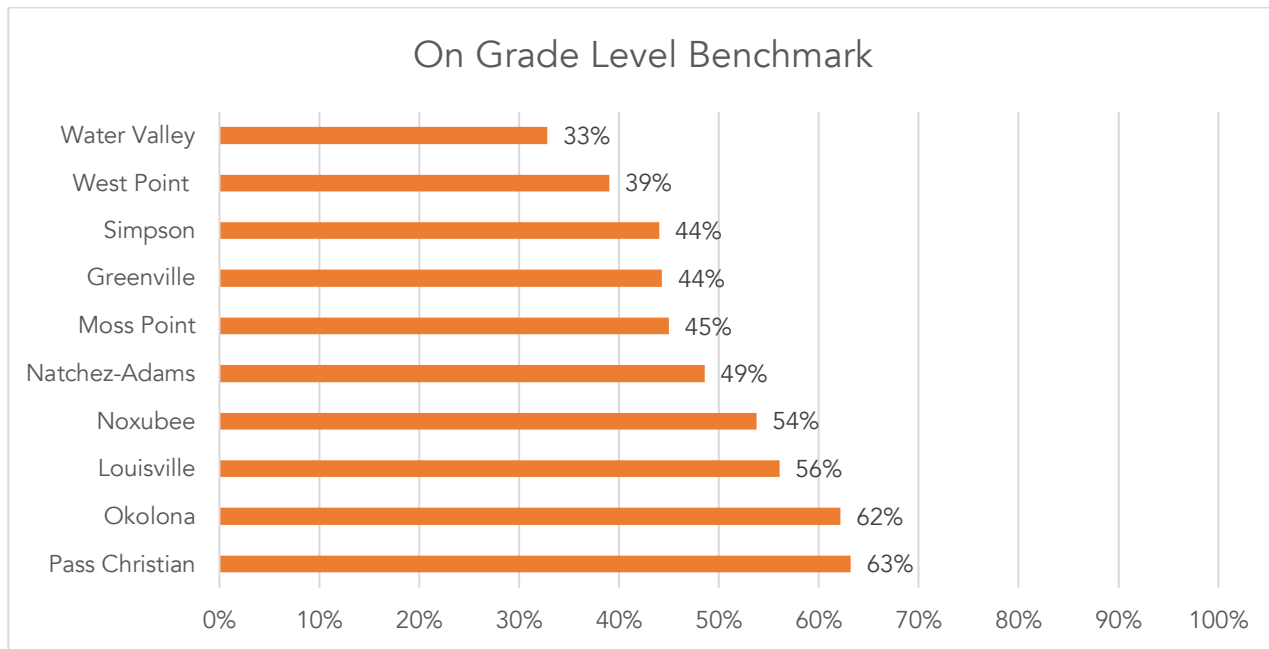
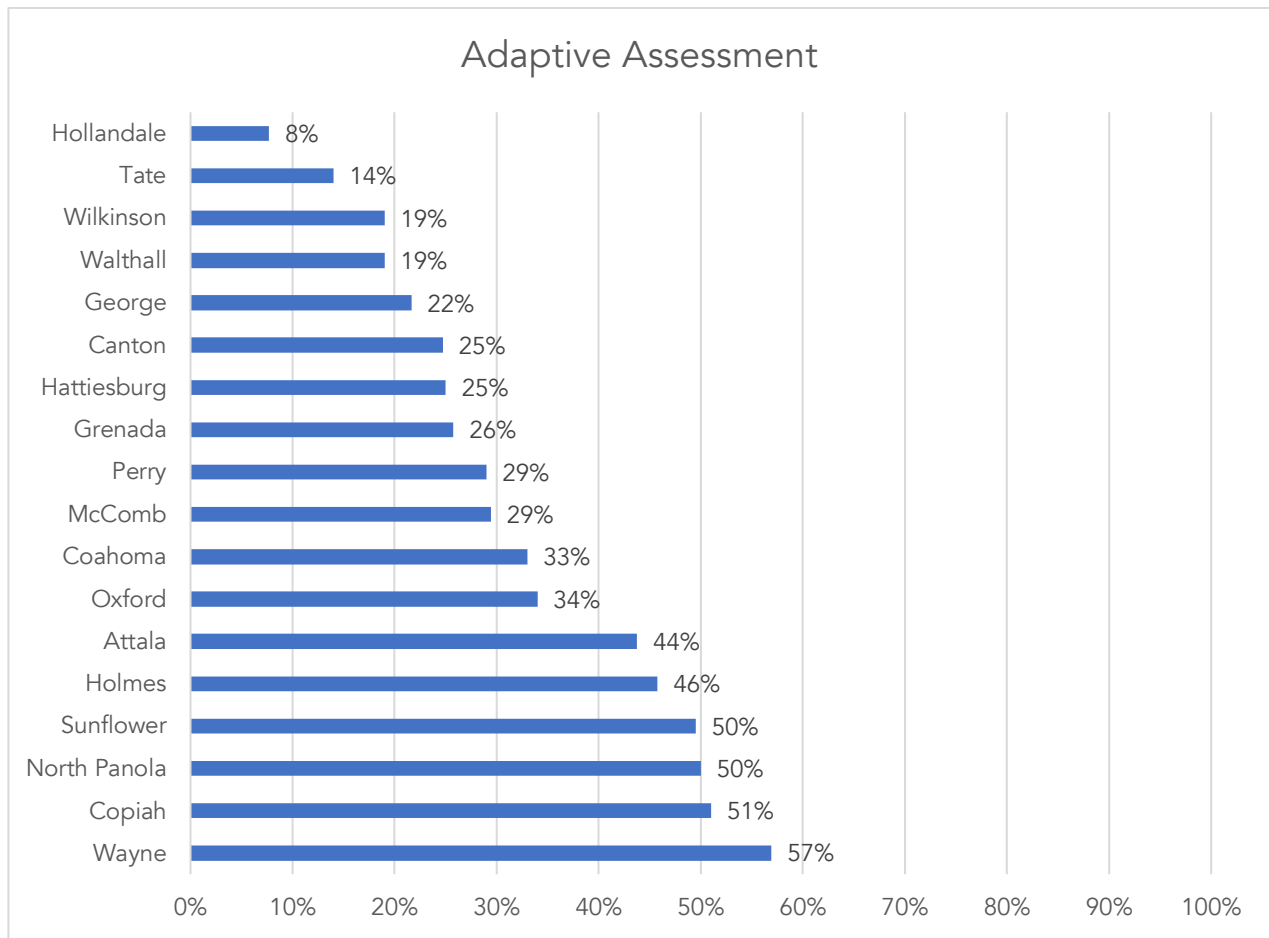
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 25: Percentage of 5th Grade ELA Students with Mastery Decline by District



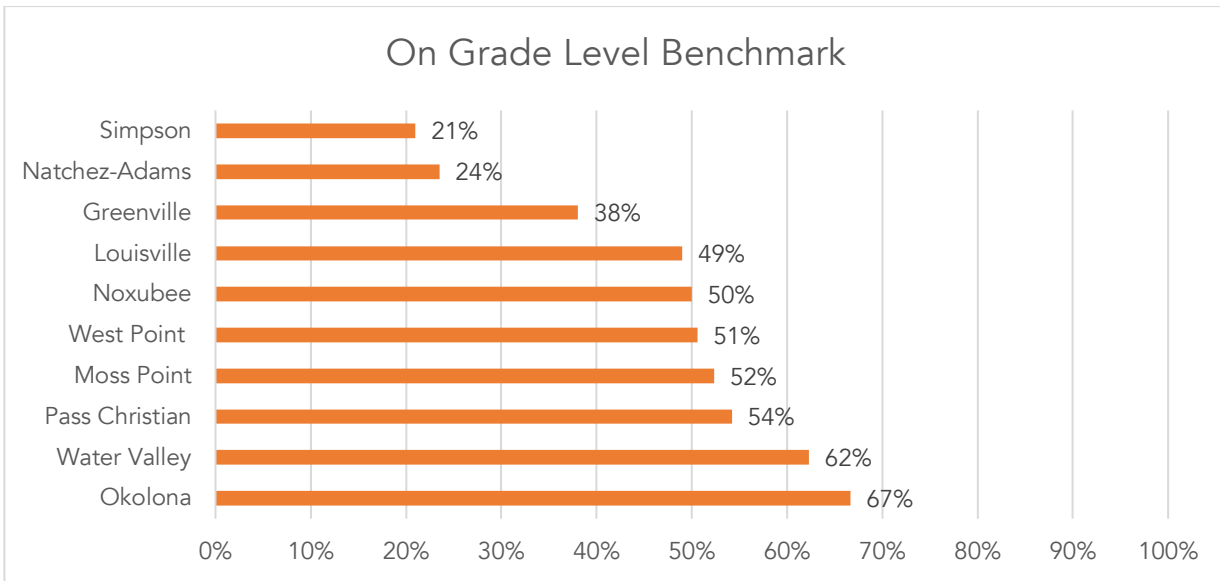
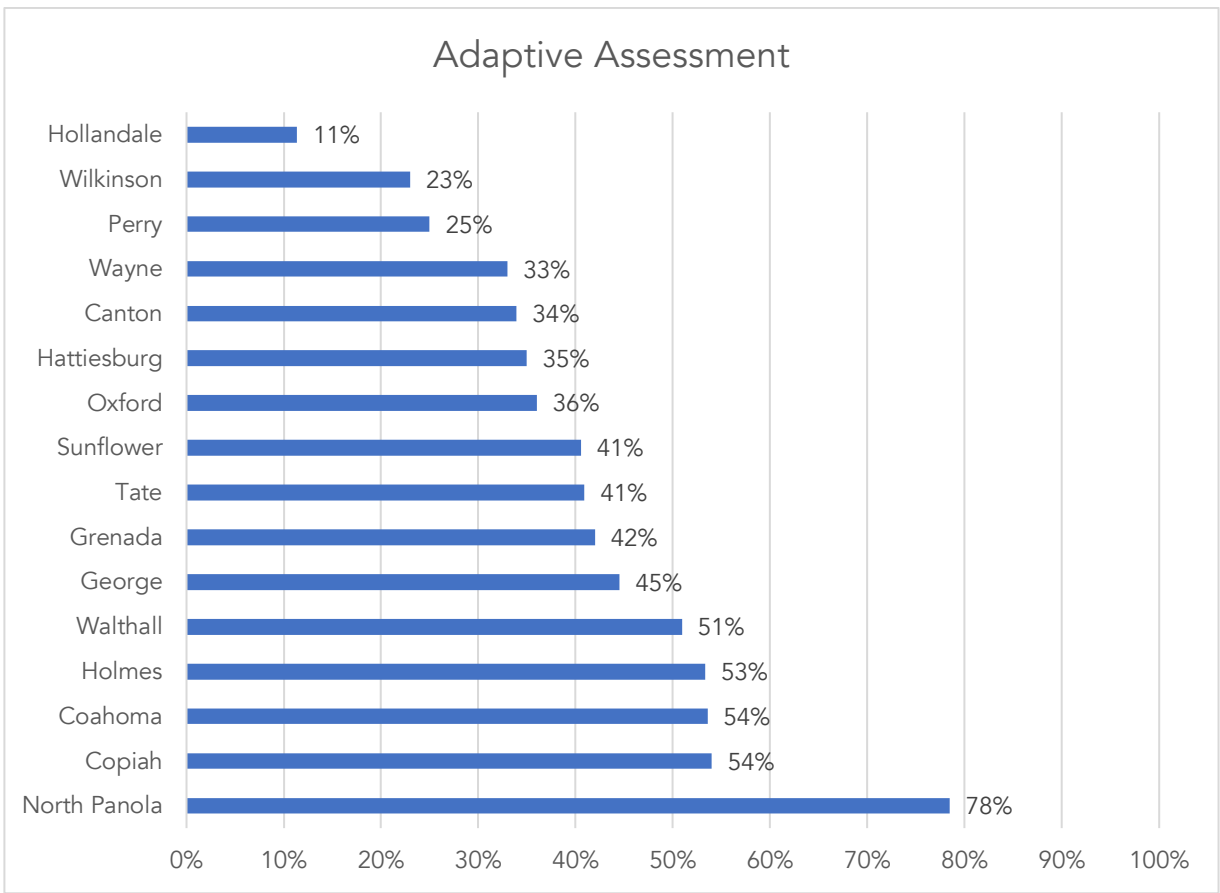
Note: Data were not reported or were not available for the following districts: Yazoo County and Okolona.

Exhibit 26: Percentage of 6th Grade ELA Students with Mastery Decline by District



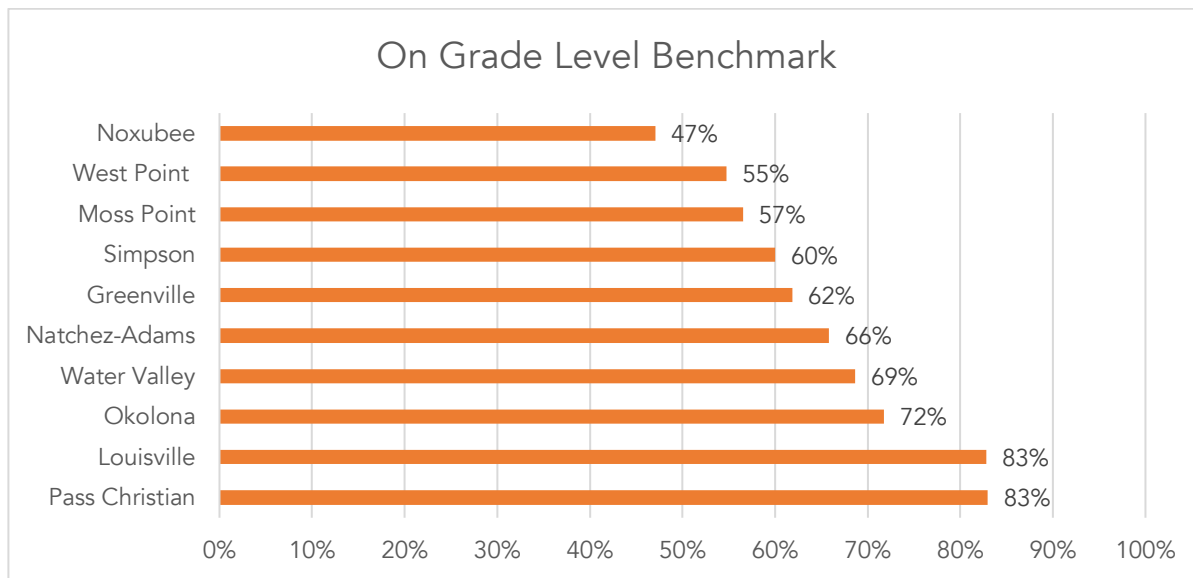
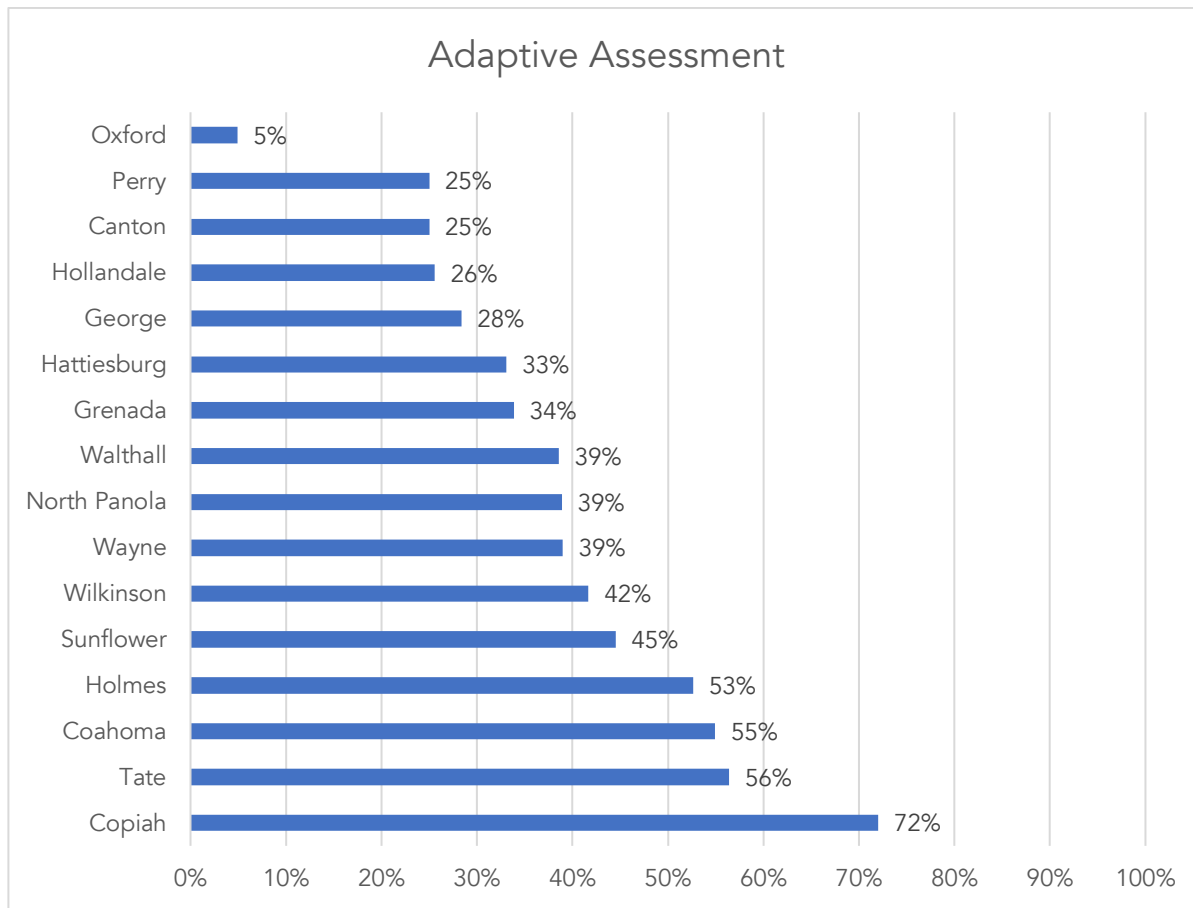
Note: Data were not reported or were not available for the following districts: Yazoo County and Madison.

Exhibit 27: Percentage of 7th Grade ELA Students with Mastery Decline by District



Note: Data were not reported or were not available for the following districts: Yazoo County, Attala, Madison, and McComb.

Exhibit 28: Percentage of 8th Grade ELA Students with Mastery Decline by District



Note: Data were not reported or were not available for the following districts: Yazoo County, Attala, Madison, and McComb.

Recommendations to Address Mastery Decline

1. **Assign Responsibility:** Designate a member or team within the school or district to manage the process of identifying, tracking, and addressing decline in mastery. This person or team would be responsible for managing the process of coordinating intervention strategies and communicating updates and progress to stakeholders.
2. **Implement Tracking Systems:** Utilize software applications or other systematic processes that automate the identification and tracking of decline in mastery. This may include student data management systems that track academic progress and flag areas of potential decline in mastery.
3. **Comprehensive Reporting:** Create detailed reports that provide an overview of decline in mastery at various levels, including district, school, grade, and classroom. These reports should enable educators to pinpoint exactly where decline in mastery is occurring to provide targeted support.
4. **Longitudinal Analysis:** Monitor and compare decline in mastery findings over time to distinguish between acute and chronic instances of decline in mastery. This will help in understanding the duration and severity of decline in mastery for a given student, grade level, school, or classroom, and inform appropriate intervention strategies.
5. **Regular Reviews:** Conduct periodic administrative review meetings with district leadership to discuss findings, brainstorm mitigation strategies, and outline corrective actions. This ensures a strategic, coordinated response to decline in mastery.
6. **Annual Evaluation of Strategies:** Review previously implemented decline in mastery mitigation strategies each year to identify what has been effective and what needs improvement. This reflective practice promotes continuous learning and refinement of strategies.
7. **Tagging and Monitoring Students:** Identify students who have experienced decline in mastery and tag them as a specific cohort each year. This ensures they receive targeted support in the following year to bridge the learning gap quickly.
8. **Address Root Causes of Decline in Mastery:** Take measures to address common causes of decline in mastery such as summer slide, absenteeism, ineffective instructional practices, misaligned resources, and course scheduling issues. This may include providing summer learning programs, enforcing attendance policies, enhancing teacher training, aligning resources with learning objectives, and optimizing course schedules.
9. **Implement Individualized Learning Plans:** Create personalized learning plans for students experiencing decline in mastery. These plans should be designed based on the unique needs and circumstances of each student and regularly updated based on their progress.
10. **Parental Engagement:** Engage parents and caregivers in the process of mitigating mastery decline. They can play a crucial role in reinforcing learning at home and supporting the child's academic progress.

These recommendations, when implemented effectively, can help schools and districts systematically identify, mitigate, and address decline in mastery, thereby improving student outcomes and maintaining a high standard of educational delivery.

Proficiency and “Bubble”

Education assessment exams use a benchmark score threshold to identify whether a student is proficient in the required content with students scoring above the threshold being proficient, while students scoring below the threshold are not proficient. Although proficiency is important, students scoring within 3% to 5% above or below the proficiency threshold represent an important cohort because these students often vacillate above and below the proficiency threshold and if left unidentified, may struggle to grow academically, which impairs the students’ academic readiness and negatively impacts representation of school districts’ improvement in accountability metrics. For the 2022-2023 school year and for students in grades 3rd through 8th in the districts reviewed, approximately one-fifth of students scored within 3% above or below the proficiency threshold in Math and one-sixth of students scored within 3% above or below the proficiency threshold in English Language Arts. This group is hereafter referred to as the “bubble” group. District administrators should make efforts to identify this group of students so that they can receive targeted instructional support to help them achieve proficiency.

Proficiency and Bubble Student Analysis

Education assessments have a benchmark score threshold identifying whether a student is proficient in the required content. By definition, students “above the line” (i.e., above the benchmark score threshold) are proficient and those falling “below the line” are not proficient.

It is important to note that proficiency should not be viewed in isolation and/or as the only measure of a successfully functioning educational process. Growth is the path to proficiency. Focusing on compounding growth for the right students is the best leading indicator to continuously improve proficiency.

Proficiency is valuable to determine where students are at a given point in time compared to where we would like them to be. Looking at the number of students that are proficient, distributed by school, by grade level, and by classroom, helps administrators make informed instructional decisions. Students that are within a certain threshold above or below the proficiency line are an important subgroup to monitor. Many times a large number of students fall within 3-5% above or below the line. These students often continue to vacillate above or below the line when left unidentified. The reason they are typically unidentified stems from the fact that they are not far enough below the line to meet the Multi-Tiered System of Support (MTSS) or Response to Intervention (RTI) thresholds³ but are not far enough above the line to maintain their position without targeted support. It is this population of students vacillating around the line that makes it difficult for schools to make material movement year over year.

Benefits of Proficiency and Bubble Student Analysis

Benefits from the proficiency and bubble student analysis span across the district from resource planning, resource implementation, and strategic initiatives. Key benefits include:

- Proficiency analysis identifies gaps in curriculum alignment and resource allocation.
- Longitudinal proficiency analysis helps administrators understand exactly where chronic issues or gaps may be present.

³ MTSS, also referred to as RTI, is a multi-step intervention process intended to identify students in need of additional classroom supports or services.

- Bubble student analysis identifies a target group of students to monitor to ensure appropriate resources are available to support students.
- Longitudinal bubble analysis often highlights specific grade levels for classrooms that generate or receive bubble students. This information can be used to strategically implement support to help educators move and retain students above the line.
- Proficiency and bubble student analysis facilitates strategic alignment between resources, budgets, and outcomes.

Ramifications of Proficiency and Bubble Student Analysis

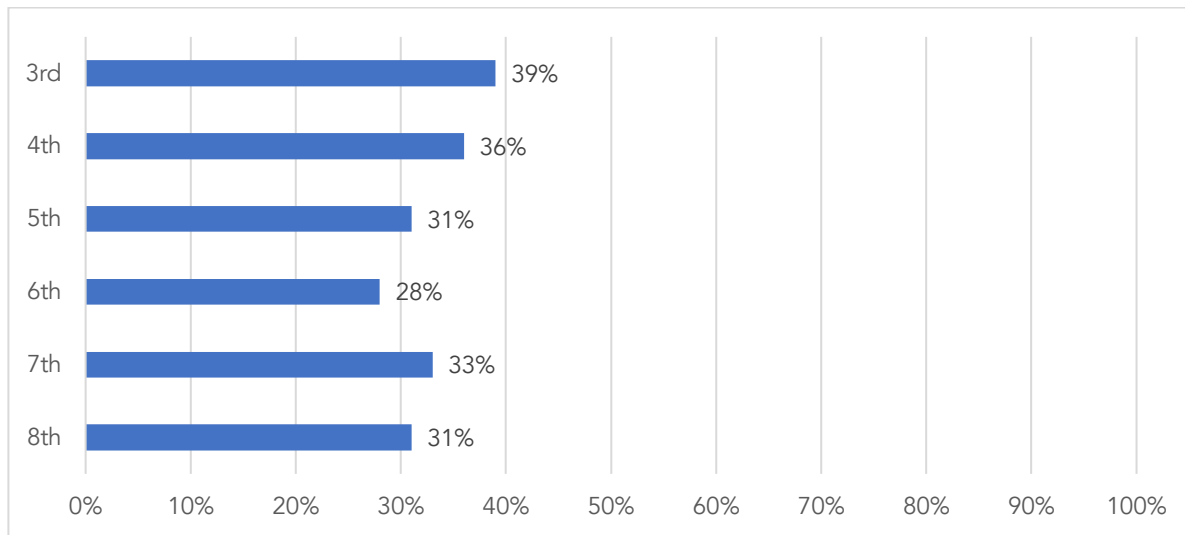
Several issues may arise when a formal process is not maintained at the school and district level. These issues include:

- lack of strategic alignment between resources, budgets, and outcomes;
- increased resource costs; or,
- schools’ and districts’ difficulty in making material and sustained improvements to their accountability metrics.

Analysis

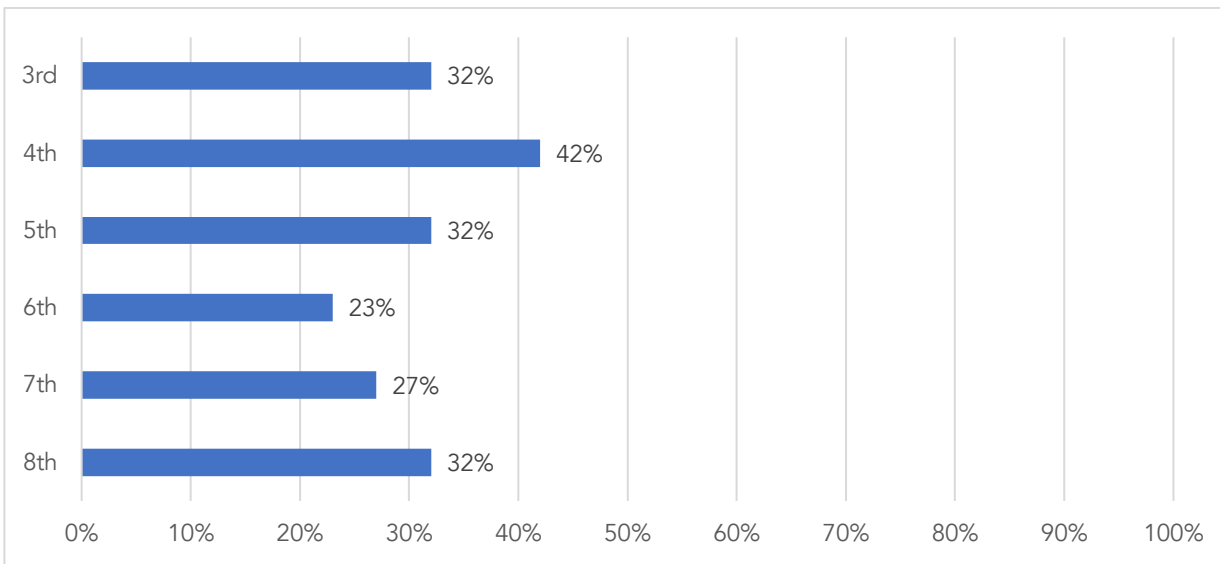
Exhibits 29 and 30 on pages 35 and 36 combine the district-provided data from benchmark assessments given throughout the 2022-23 school year to 3rd through 8th grades in the districts reporting to illustrate Math and ELA proficiency.

Exhibit 29: Percentage of Proficient Math Students on the 2022-2023 Benchmark Assessment



Note: Data were not reported or were not available for the following districts: Yazoo County (all grades), Okolona (5th grade), and Attala (7th grade).

Exhibit 30: Percentage of Proficient ELA Students on the 2022-2023 Benchmark Assessment

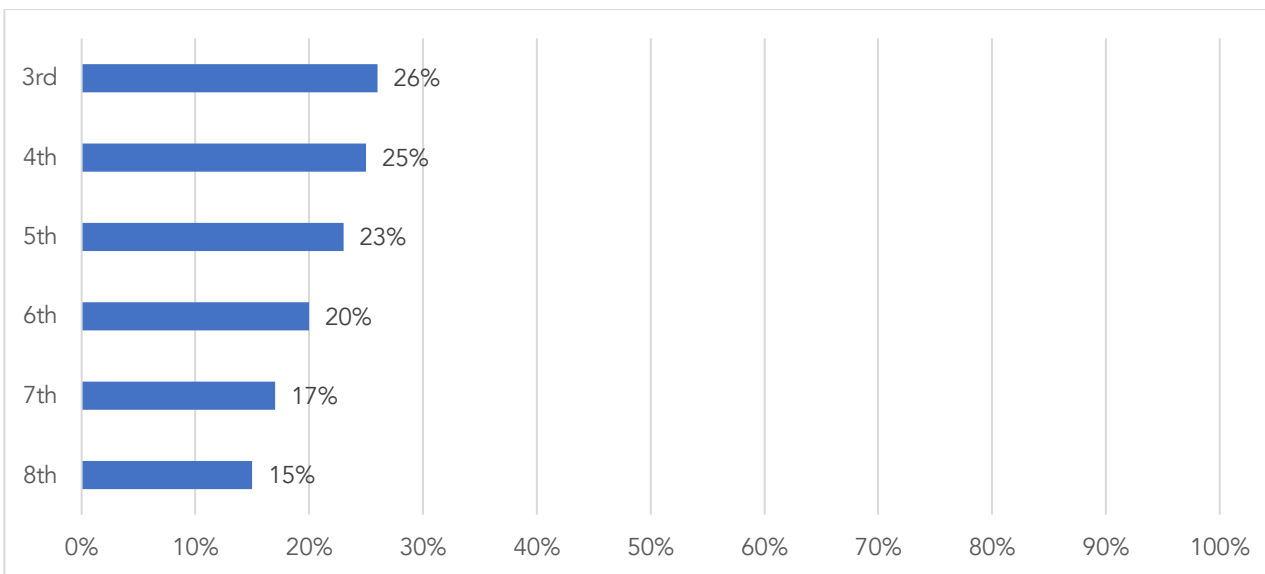


Note: Data were not reported or were not available for the following districts: Yazoo County (all grades), Okolona (5th grade), and Attala (7th and 8th grades).

Benchmark Assessment Bubble Student Analysis

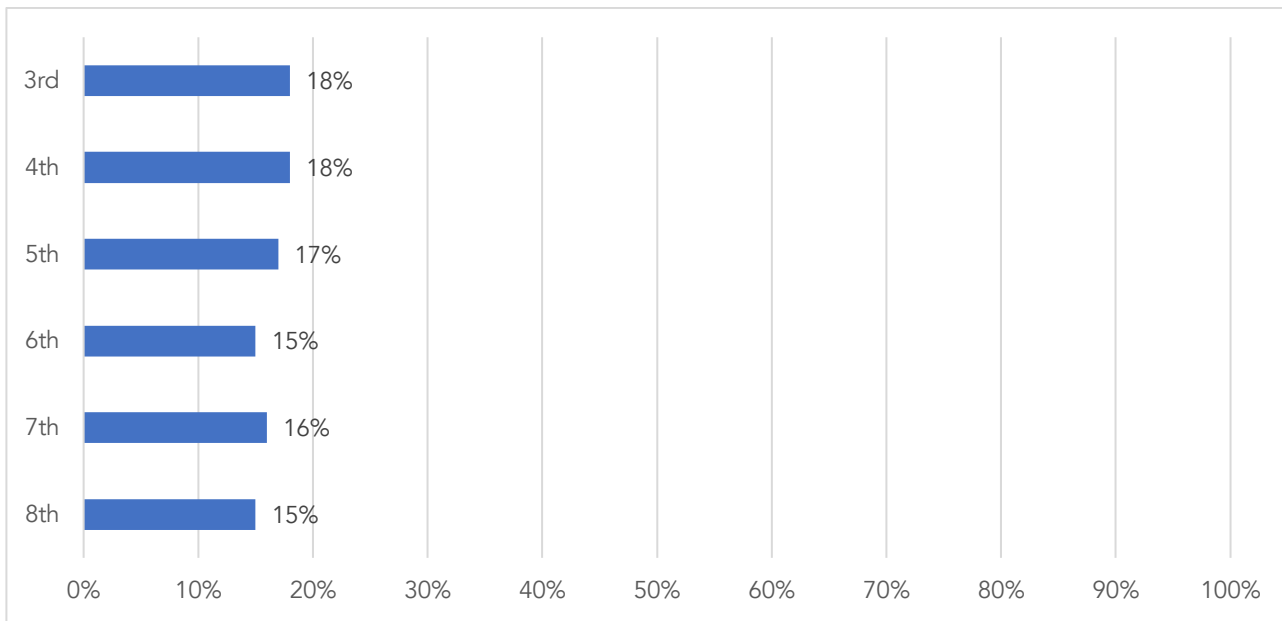
Exhibits 31 and 32, pages 36 and 37, show the percentage of bubble students in Math and ELA in school years 2022-2023 by grade level in the districts reporting. GlimpseK12 used a 3% threshold above or below the proficiency line to identify bubble students in the end-of-year assessment.

Exhibit 31: Percentage of Math Bubble Students on the 2022-2023 Benchmark Assessment



Note: Data were not reported or were not available for the following districts: Yazoo County (all grades), Okolona (5th grade), and Attala (7th grade).

Exhibit 32: Percentage of ELA Bubble Students on the 2022-2023 Benchmark Assessment

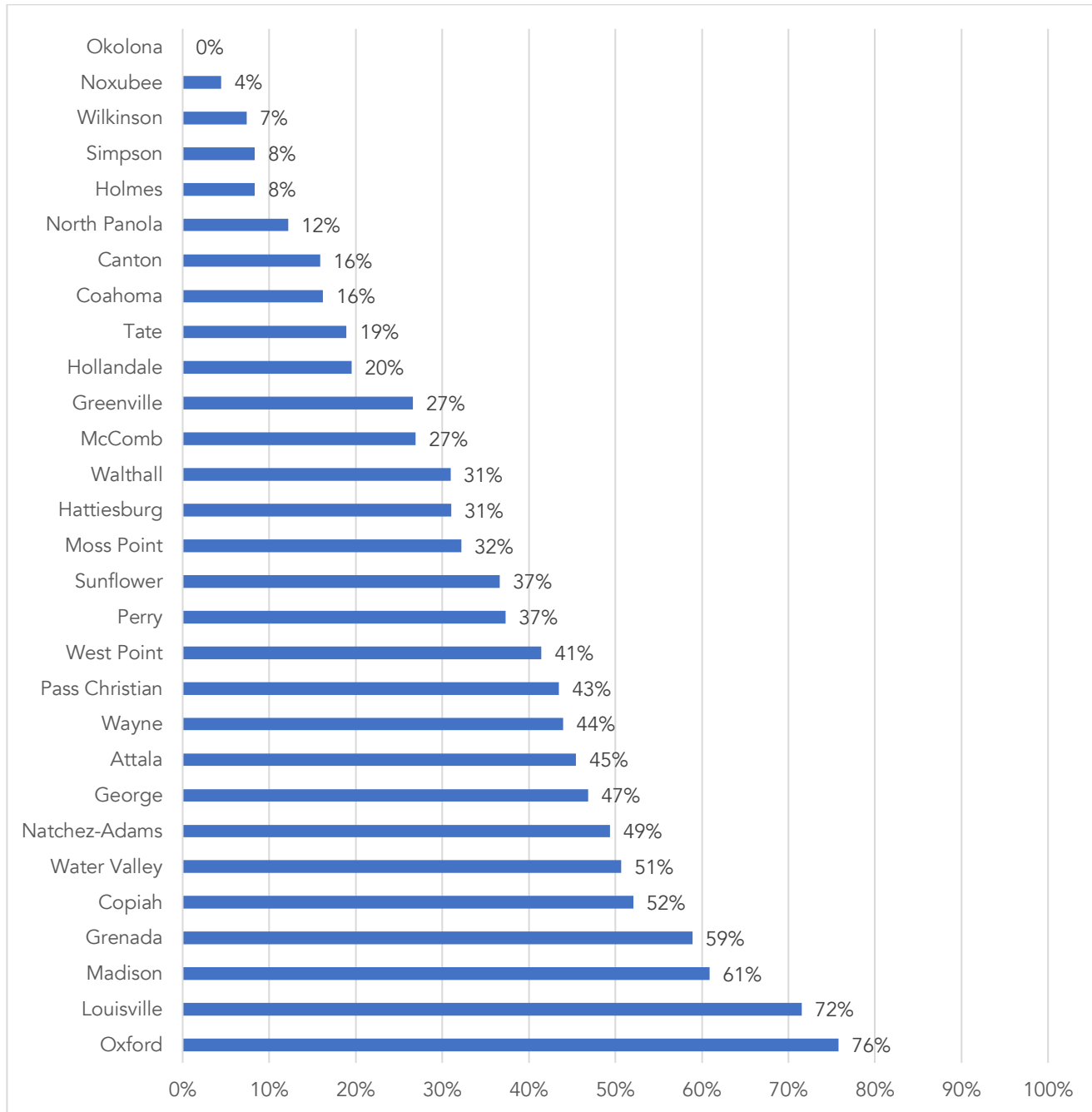


Note: Data were not reported or were not available for the following districts: Yazoo County (all grades), Okolona (5th grade), and Attala (7th and 8th grades).

Math Benchmark Assessment Proficiency Analysis by District and Grade

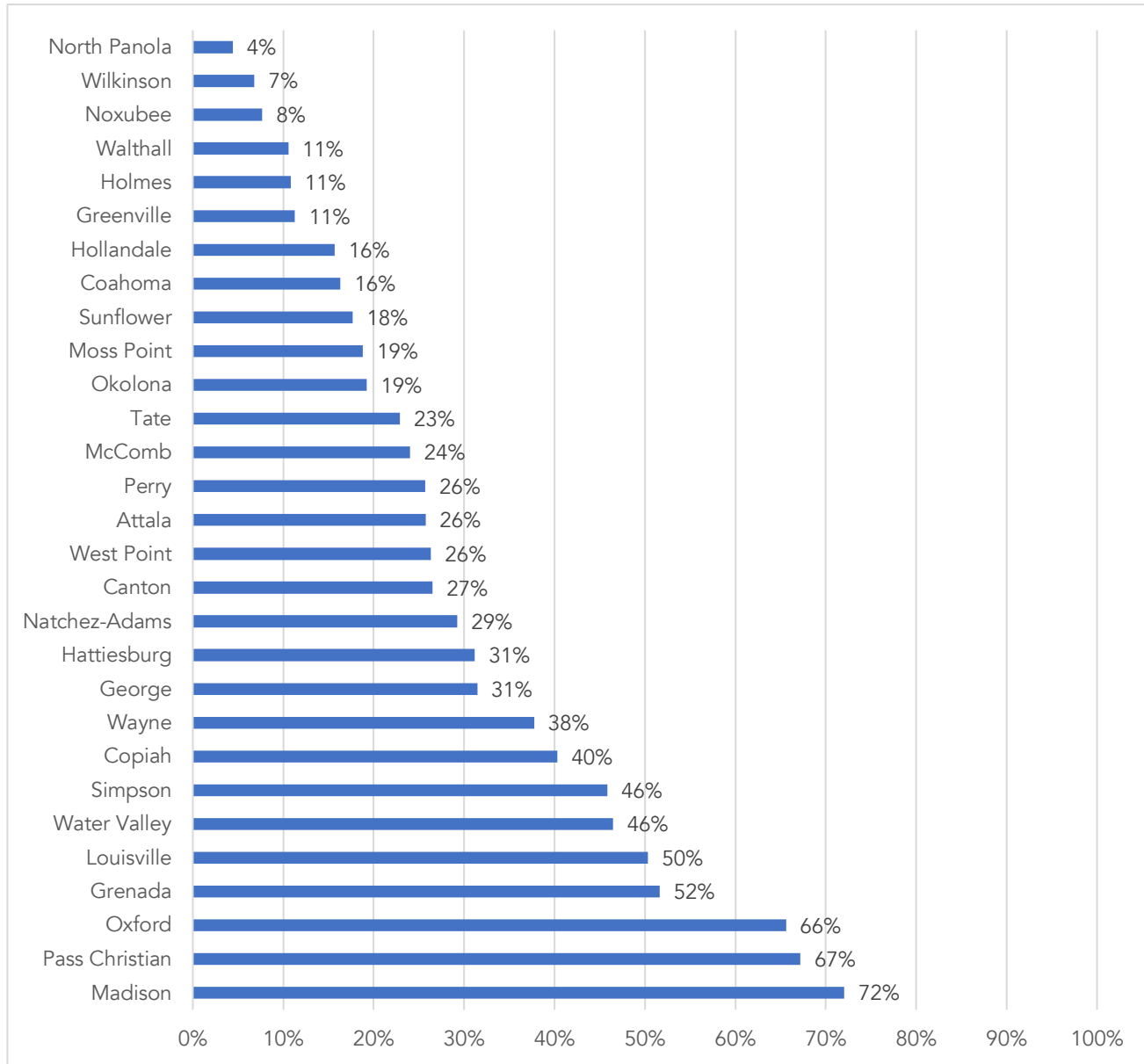
Exhibits 33 through 38, pages 38 through 43, show the percentages of proficient Math students by grade level (3rd through 8th) on 2022-2023 end-of-year district assessments in the districts reporting.

Exhibit 33: Percentage of Proficient 3rd Grade Math Students on the 2022-2023 Benchmark Assessment



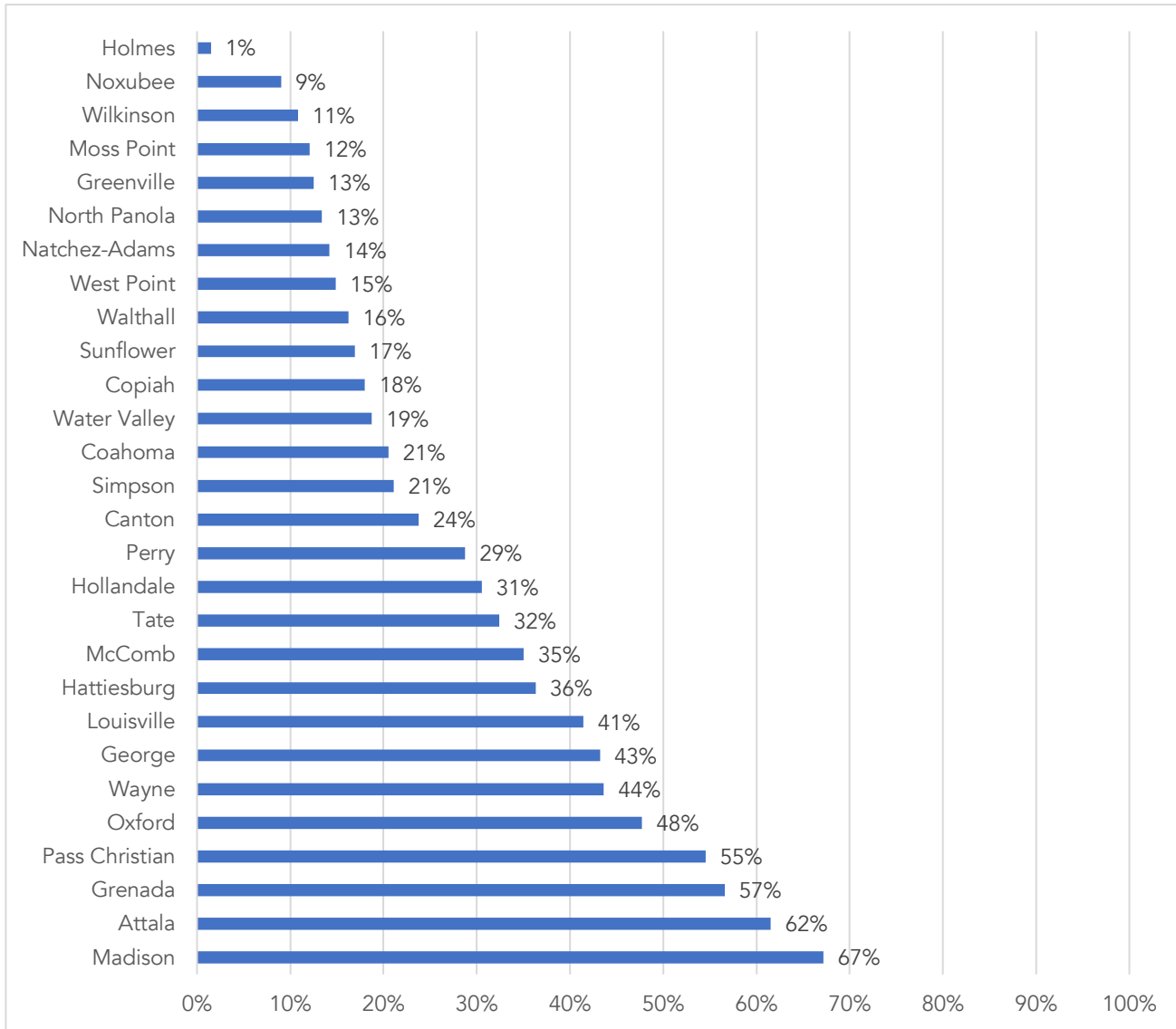
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 34: Percentage of Proficient 4th Grade Math Students on the 2022-2023 Benchmark Assessment



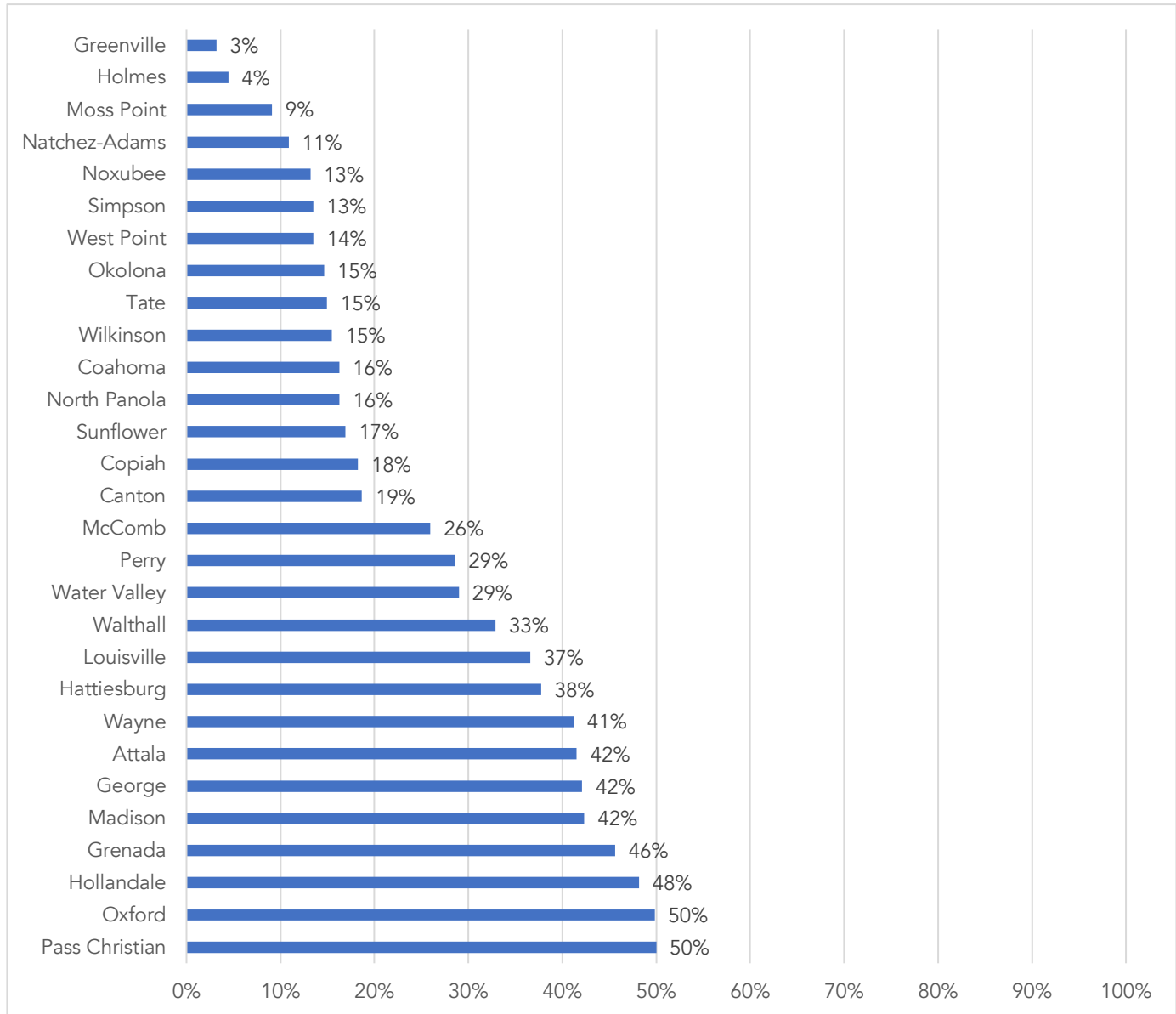
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 35: Percentage of Proficient 5th Grade Math Students on the 2022-2023 Benchmark Assessment



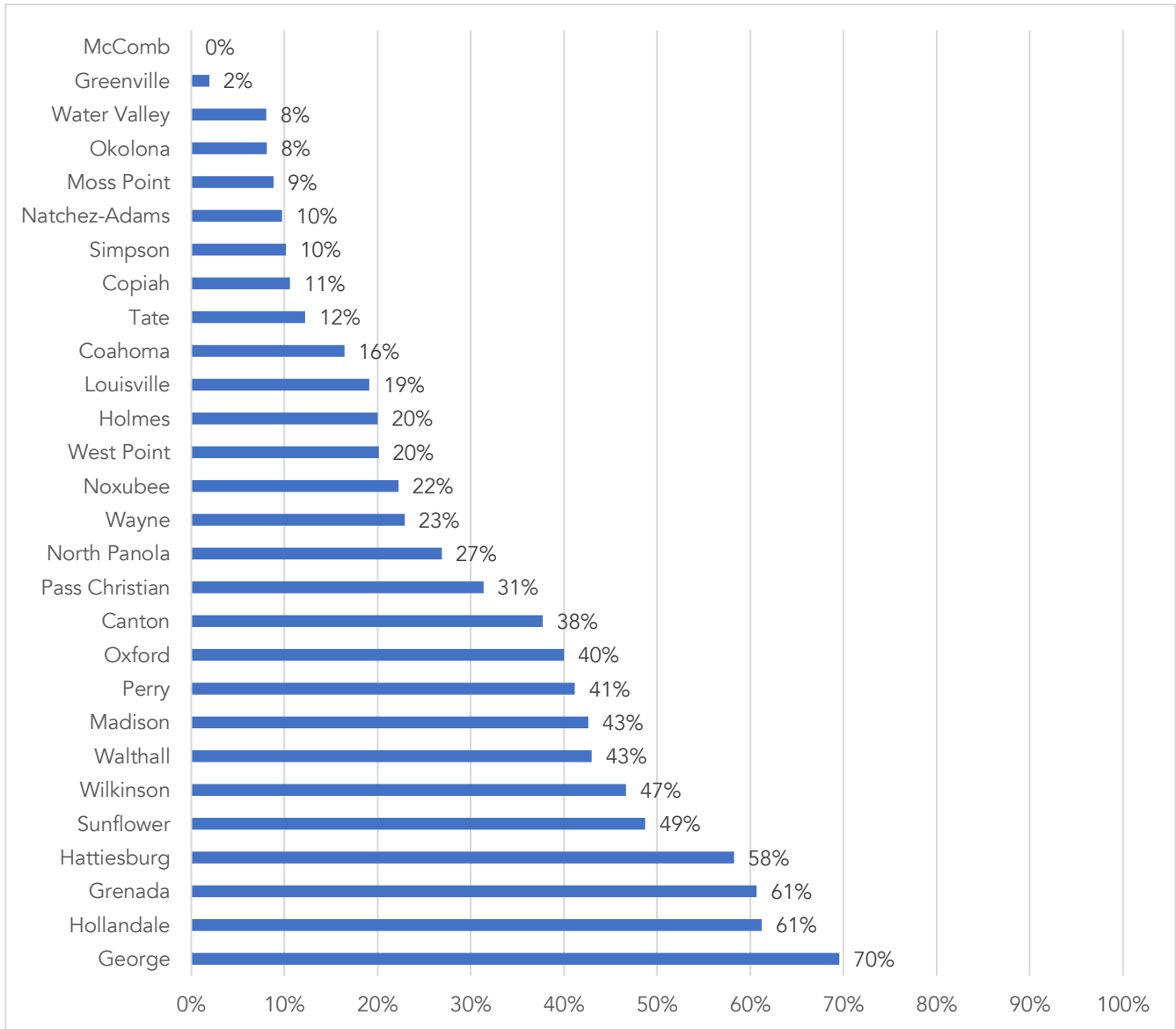
Note: Data were not reported or were not available for the following districts: Yazoo County and Okolona.

Exhibit 36: Percentage of Proficient 6th Grade Math Students on the 2022-2023 Benchmark Assessment



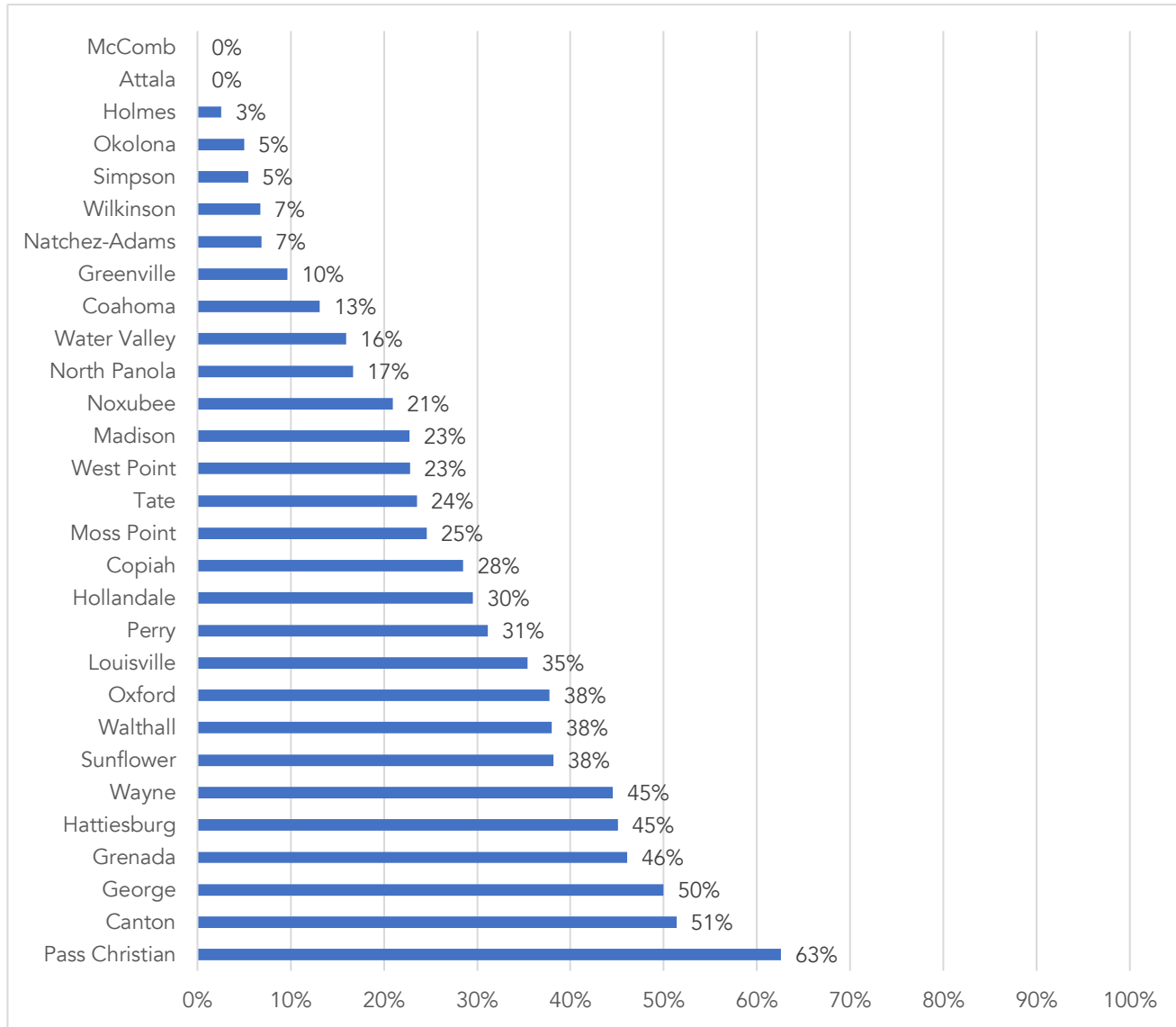
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 37: Percentage of Proficient 7th Grade Math Students on the 2022-2023 Benchmark Assessment



Note: Data were not reported or were not available for the following districts: Yazoo County and Attala.

Exhibit 38: Percentage of Proficient 8th Grade Math Students on the 2022-2023 Benchmark Assessment

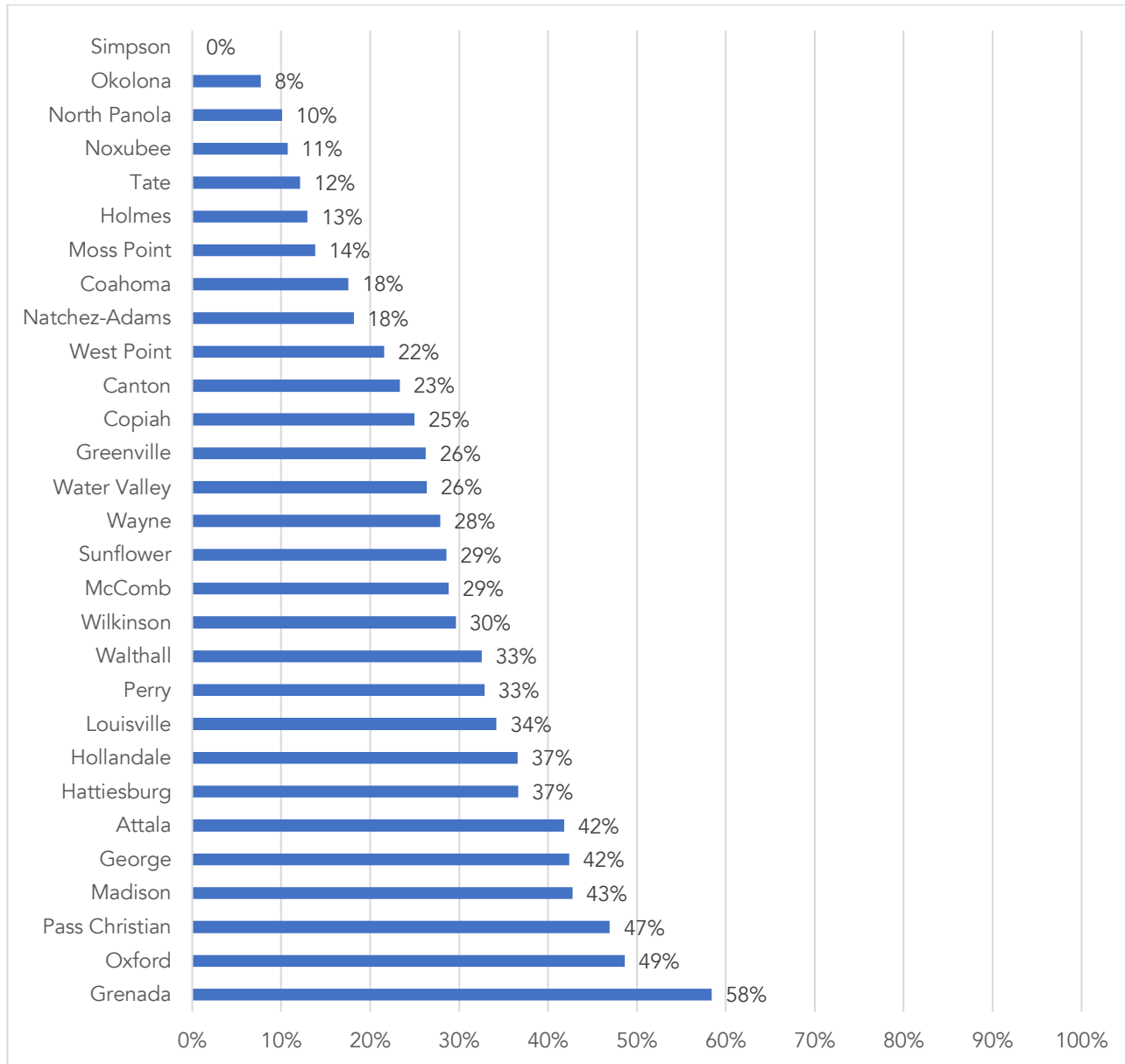


Note: Data were not reported or were not available for the following district: Yazoo County.

English Language Arts (ELA) Benchmark Assessment Proficiency Analysis by District and Grade

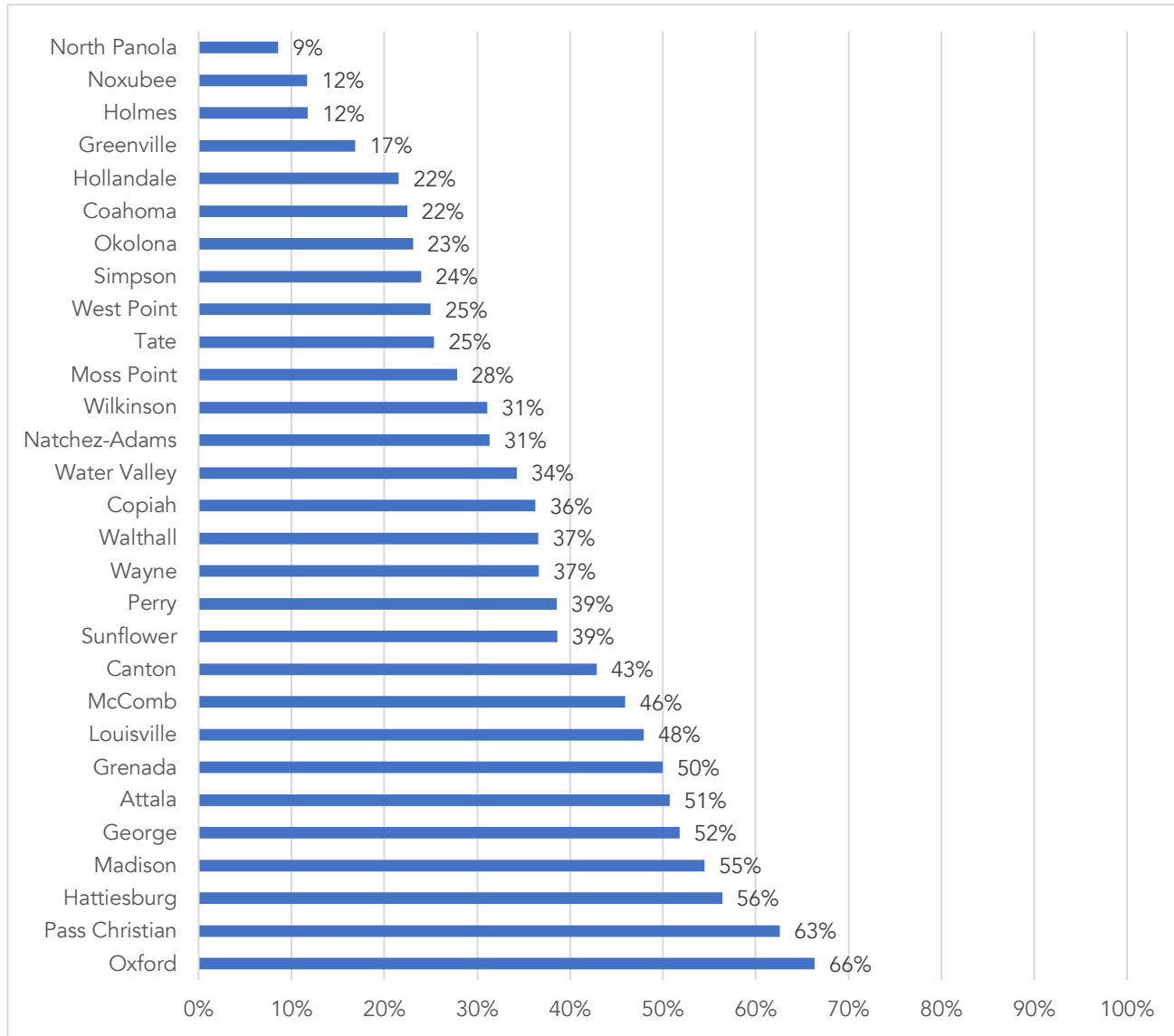
Exhibits 39 through 44, pages 44 through 49, show the percentage of proficient ELA students in the districts reporting on the 2022-2023 end-of-year district assessment by grade level (3rd through 8th).

Exhibit 39: Percentage of Proficient 3rd Grade ELA Students on the 2022-2023 Benchmark Assessment



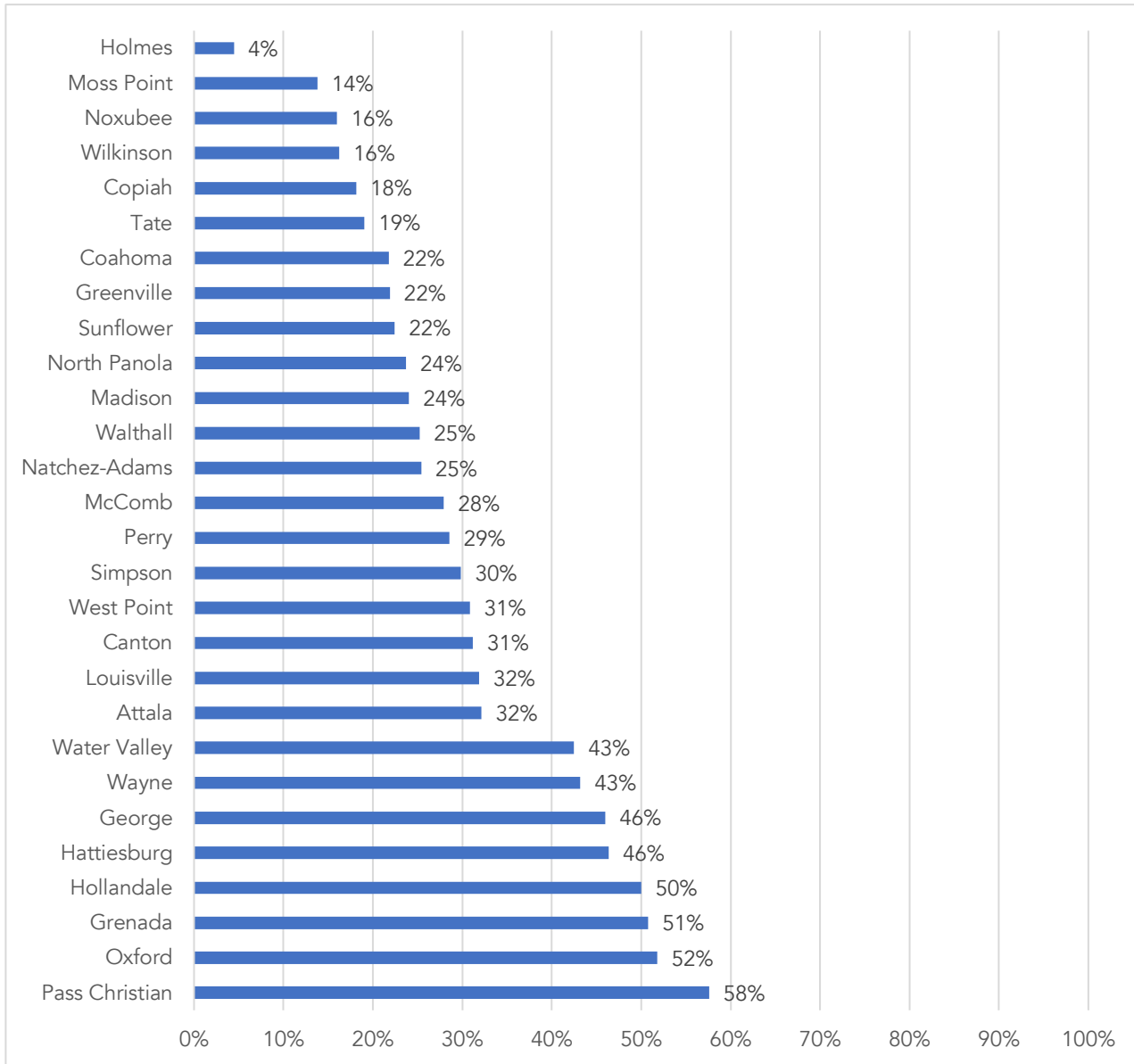
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 40: Percentage of Proficient 4th Grade ELA Students on the 2022-2023 Benchmark Assessment



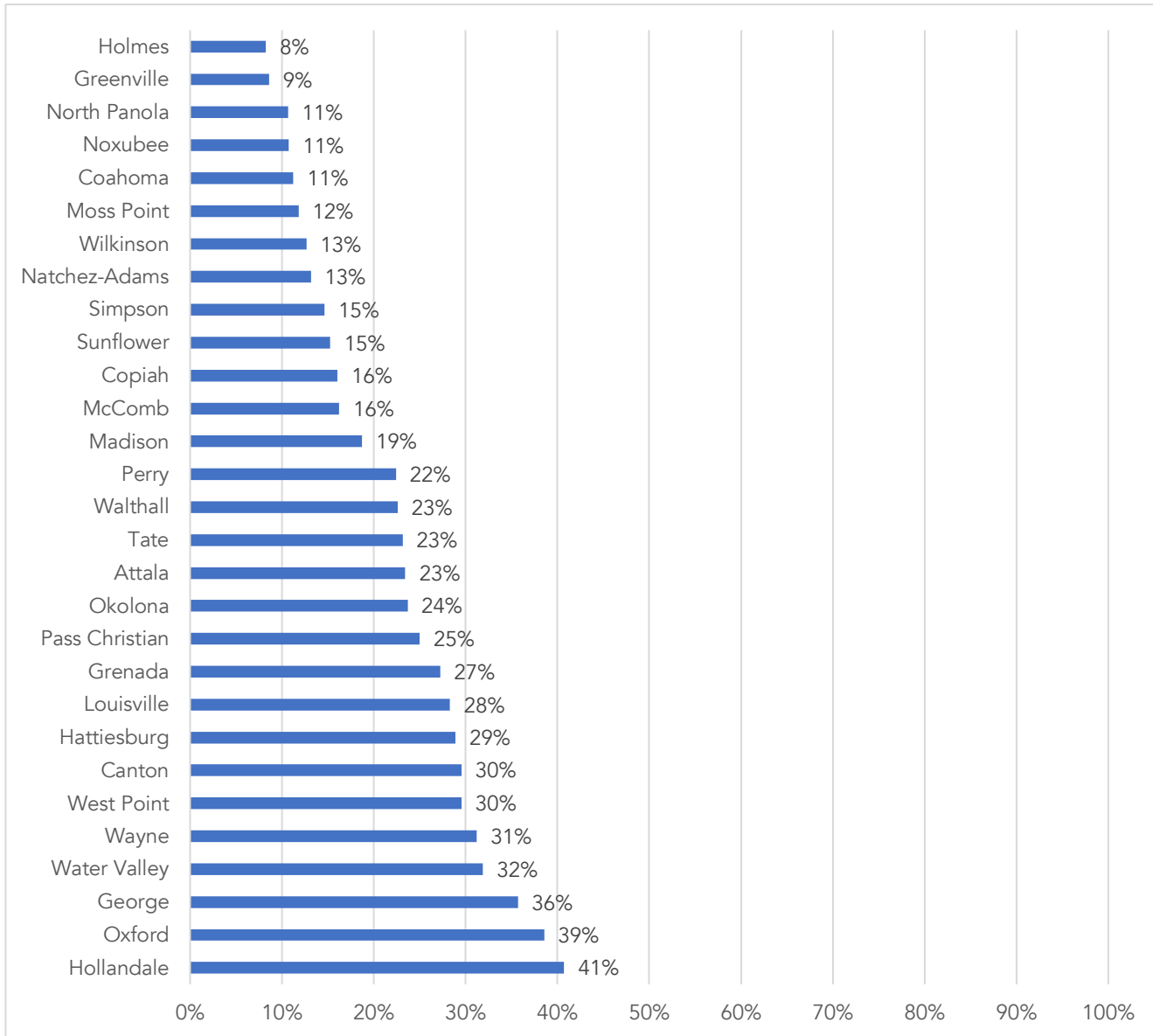
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 41: Percentage of Proficient 5th Grade ELA Students on the 2022-2023 Benchmark Assessment



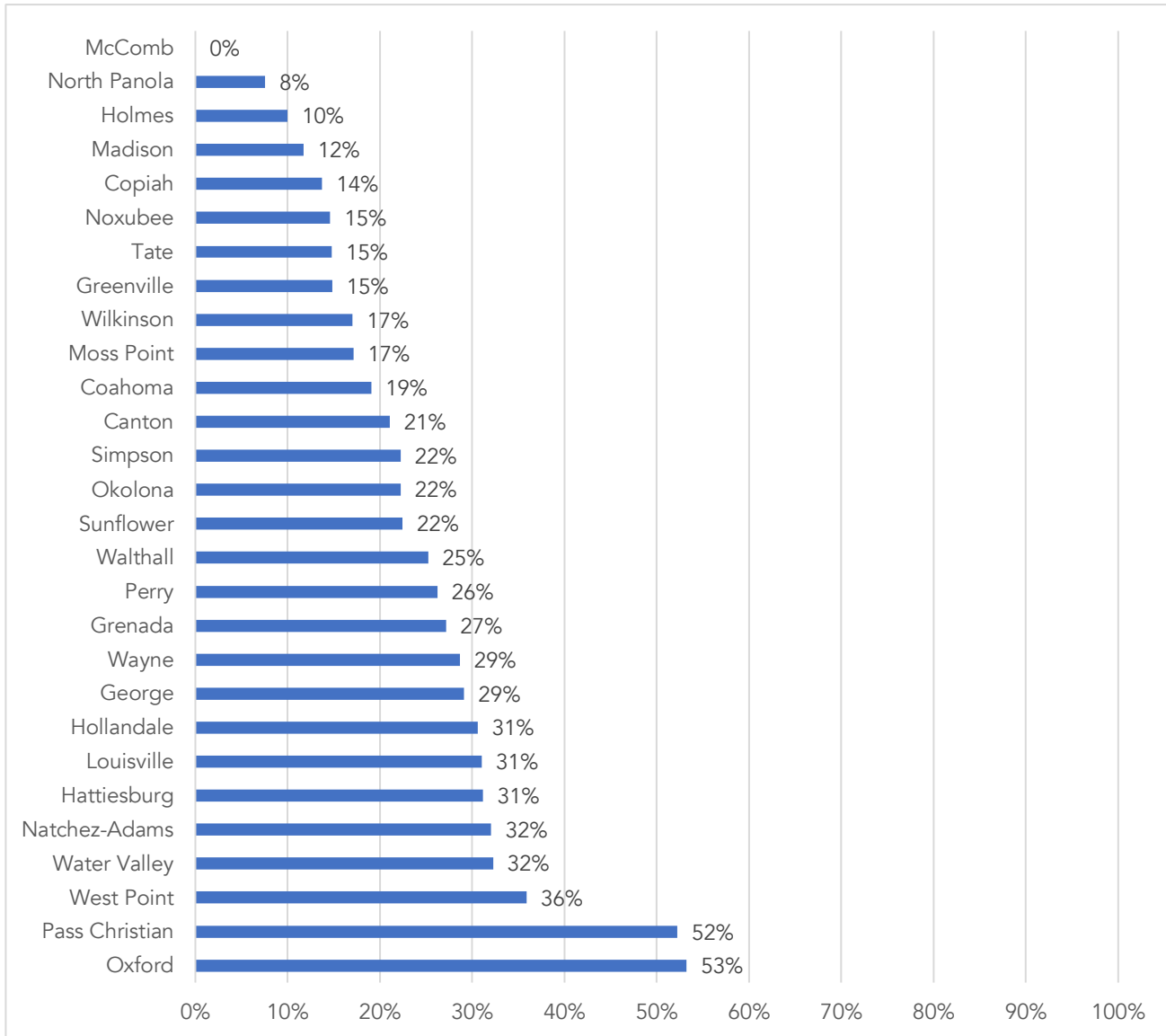
Note: Data were not reported or were not available for the following districts: Yazoo County and Okolona.

Exhibit 42: Percentage of Proficient 6th Grade ELA Students on the 2022-2023 Benchmark Assessment



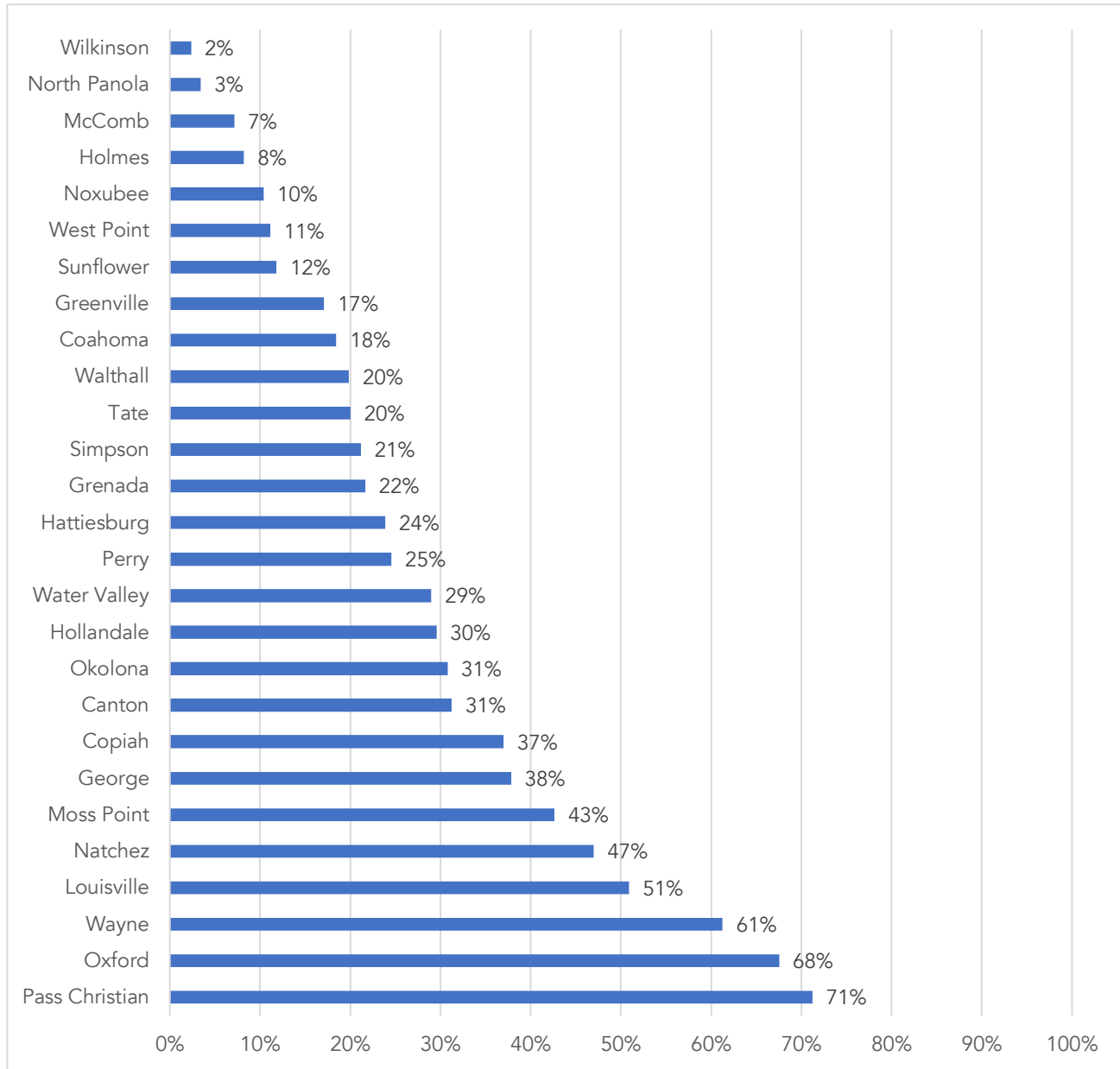
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 43: Percentage of Proficient 7th Grade ELA Students on the 2022-2023 Benchmark Assessment



Note: Data were not reported or were not available for the following districts: Yazoo County and Attala.

Exhibit 44: Percentage of Proficient 8th Grade ELA Students on the 2022-2023 Benchmark Assessment

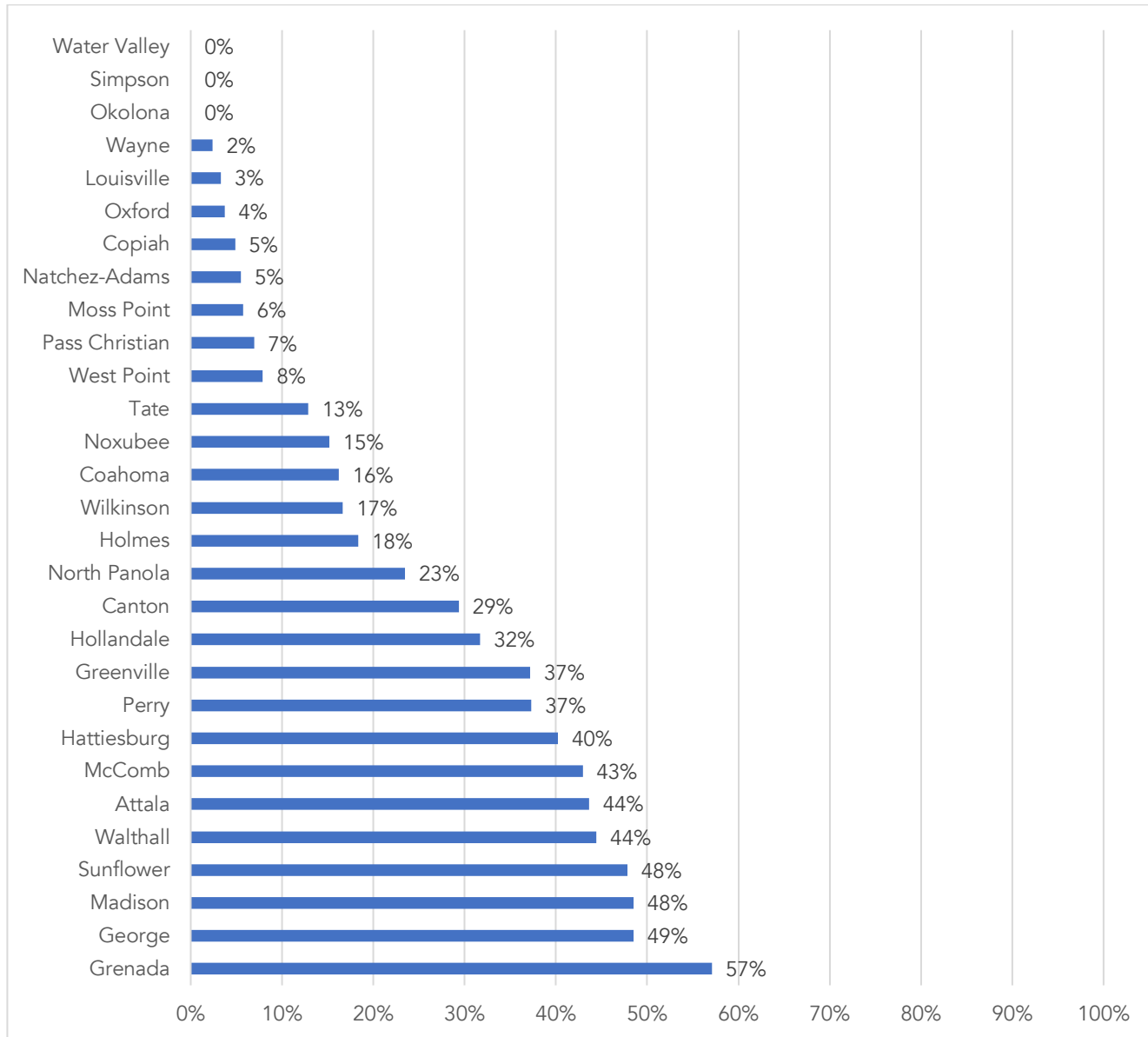


Note: Data were not reported or were not available for the following districts: Yazoo County and Attala.

Math Benchmark Assessment Bubble Student Analysis by District and Grade

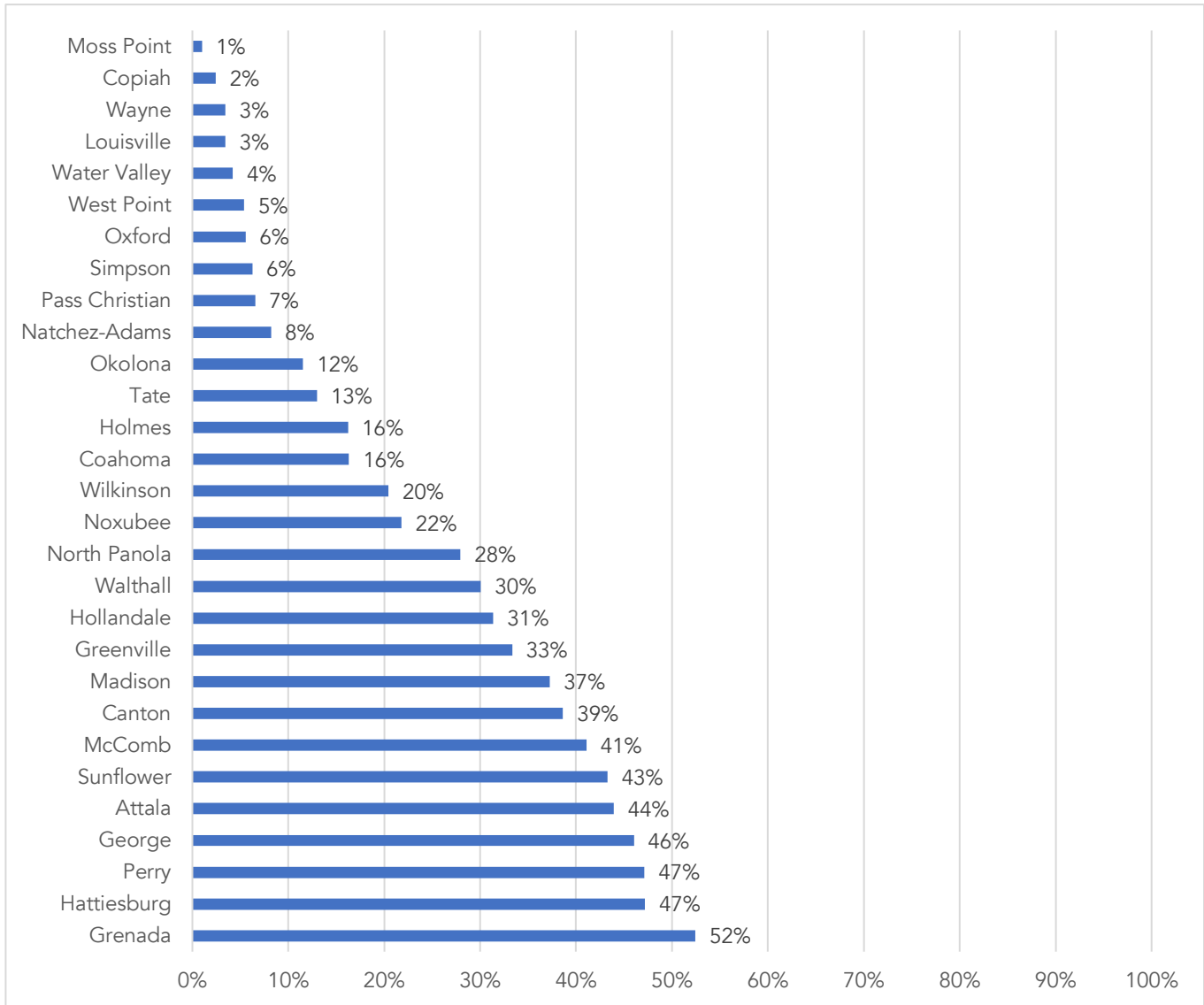
Exhibits 45 through 50, pages 50 through 55, show the percentages of bubble Math students in the districts reporting on the end-of-year district assessment by grade level (3rd through 8th).

Exhibit 45: Percentage of 3rd Grade Math Bubble Students on the 2022-2023 Benchmark Assessment



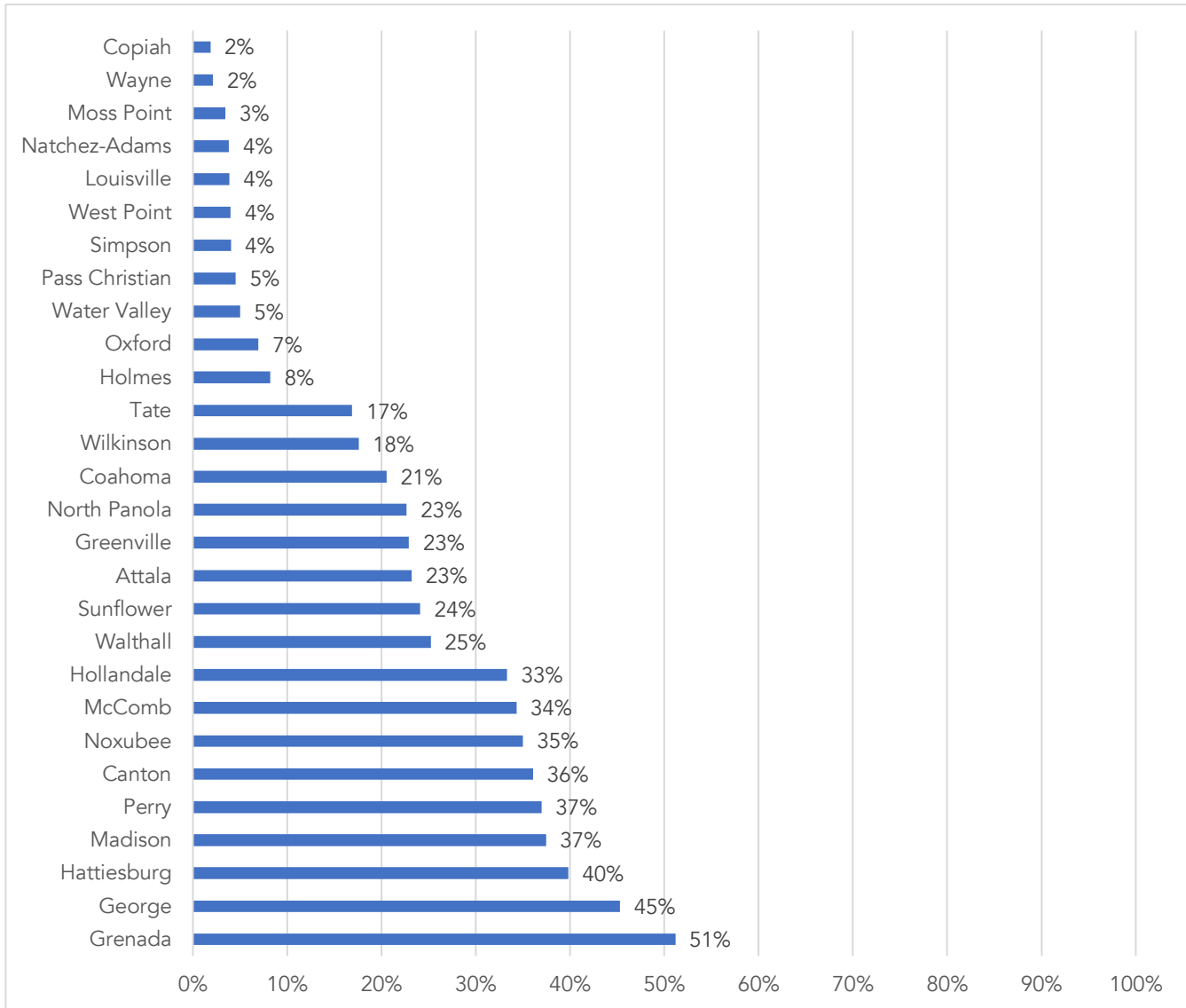
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 46: Percentage of 4th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment



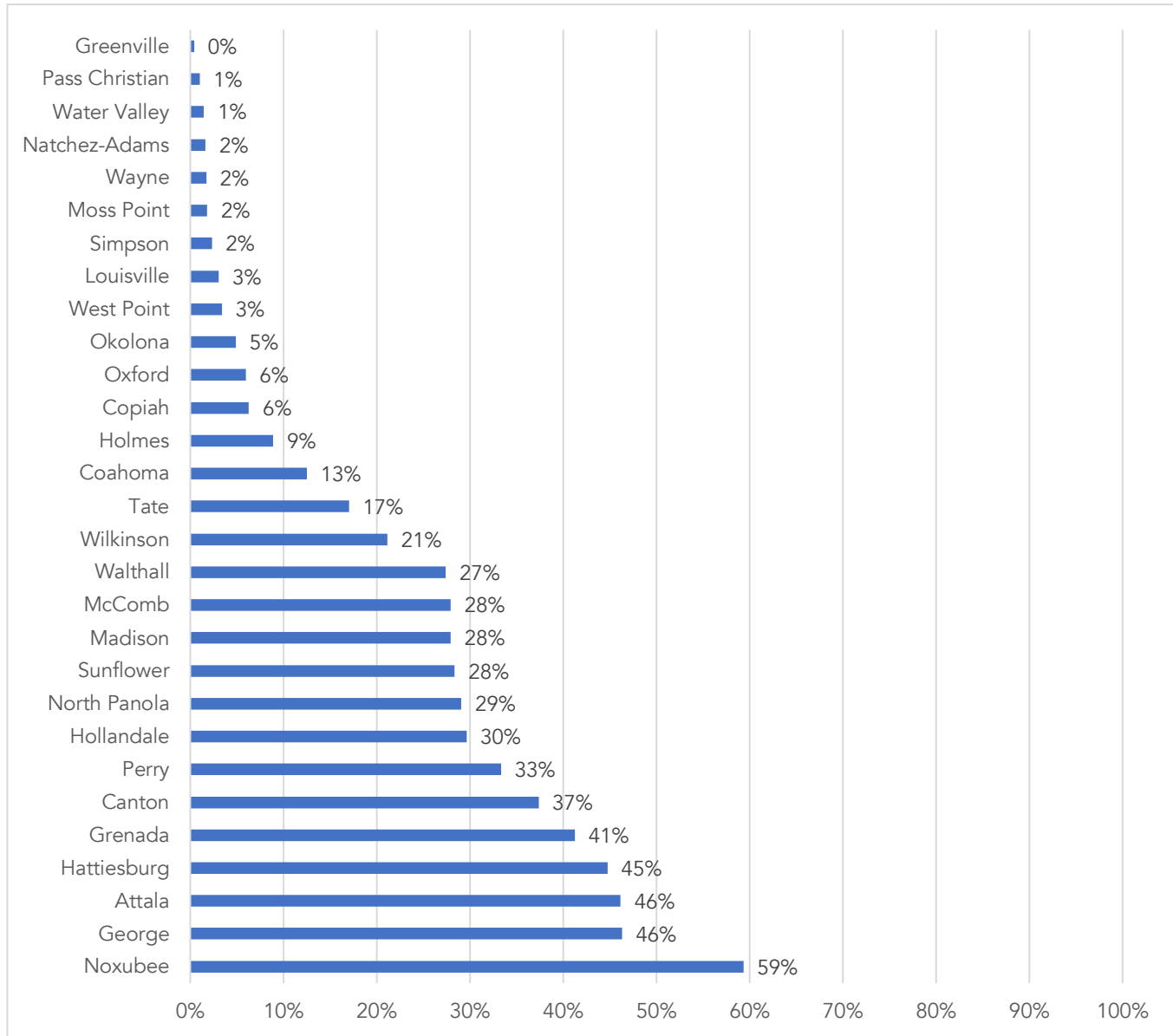
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 47: Percentage of 5th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment



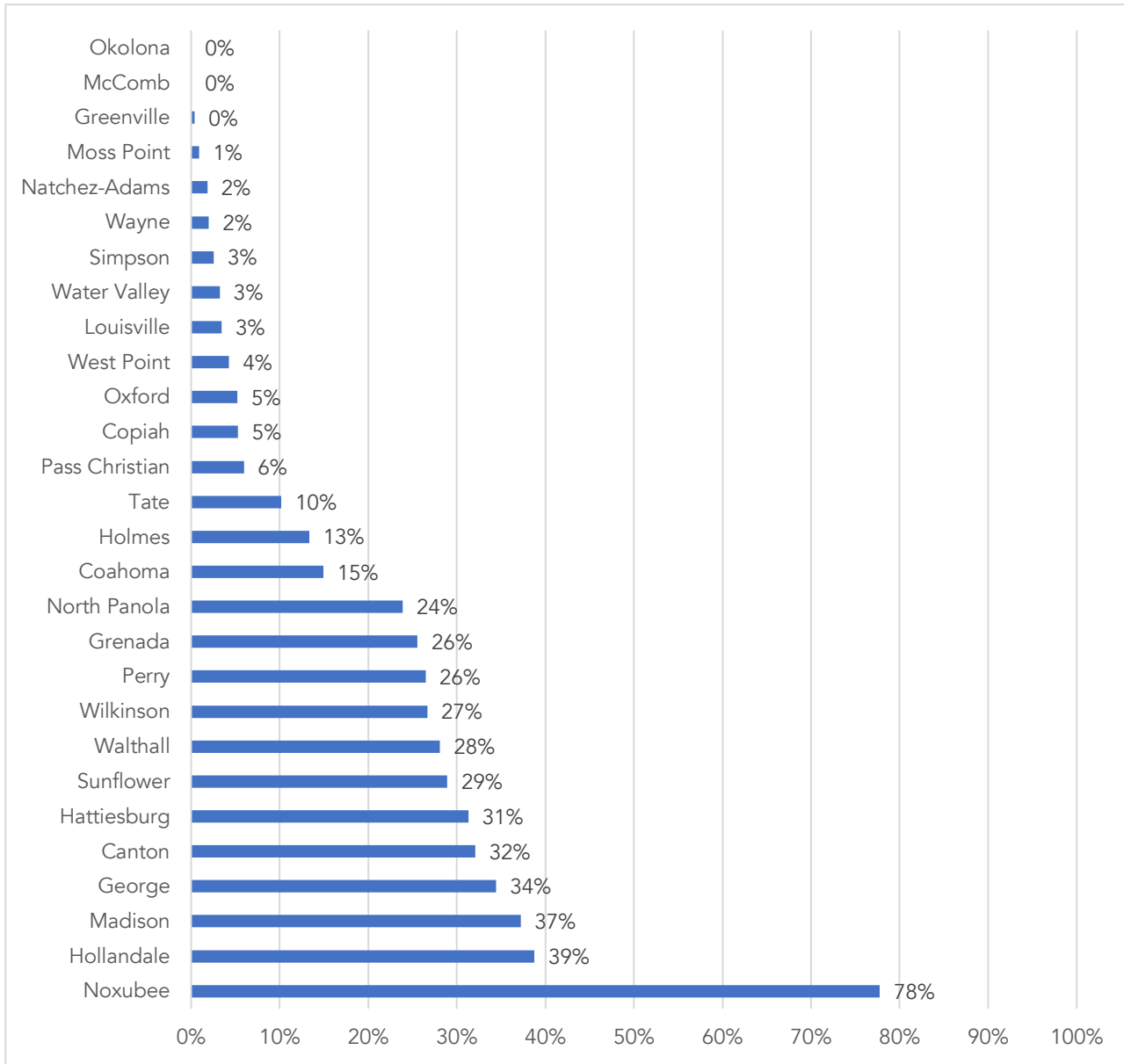
Note: Data were not reported or were not available for the following districts: Yazoo County and Okolona.

Exhibit 48: Percentage of 6th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment



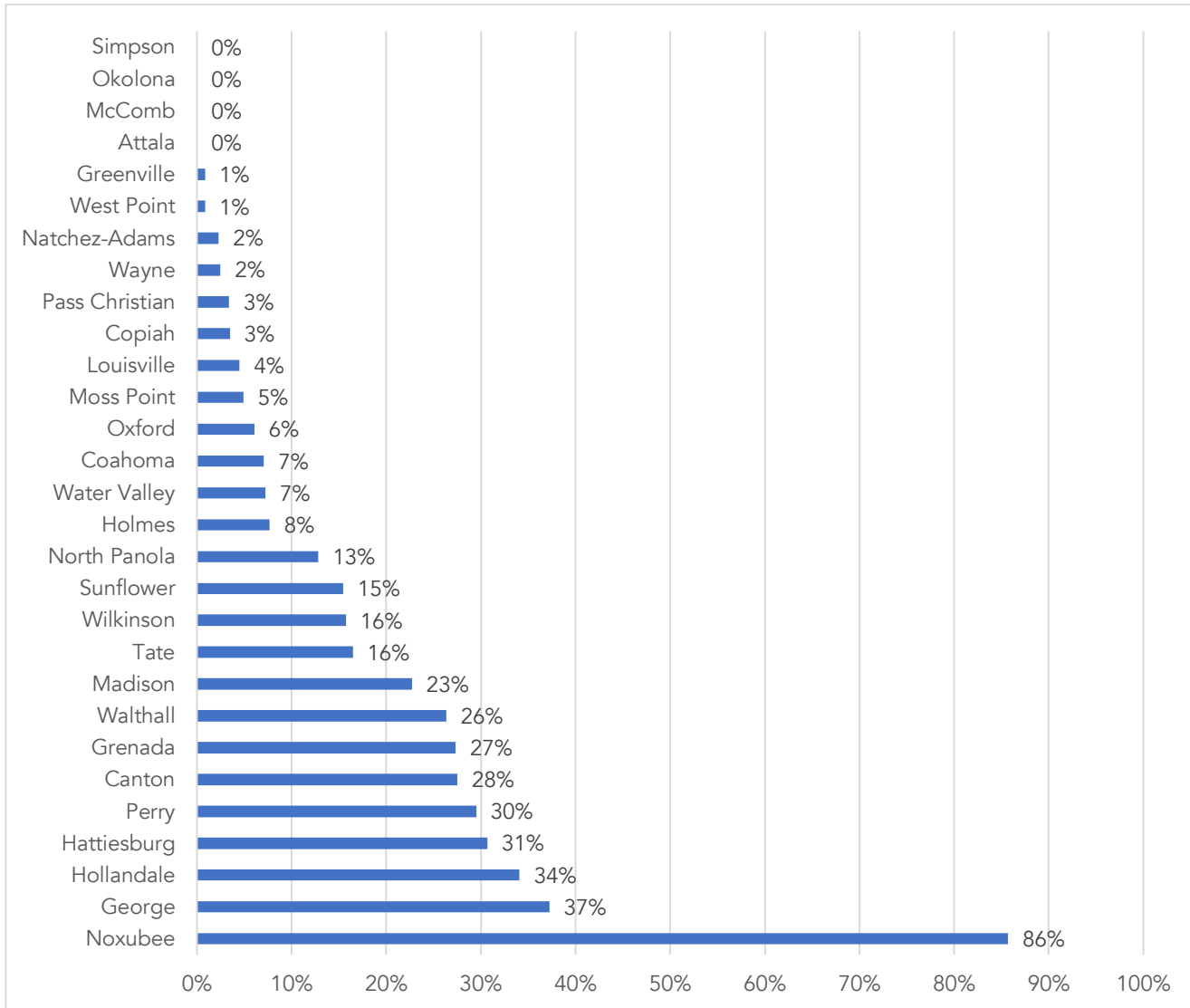
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 49: Percentage of 7th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment



Note: Data were not reported or were not available for the following districts: Yazoo County and Attala.

Exhibit 50: Percentage of 8th Grade Math Bubble Students on the 2022-2023 Benchmark Assessment

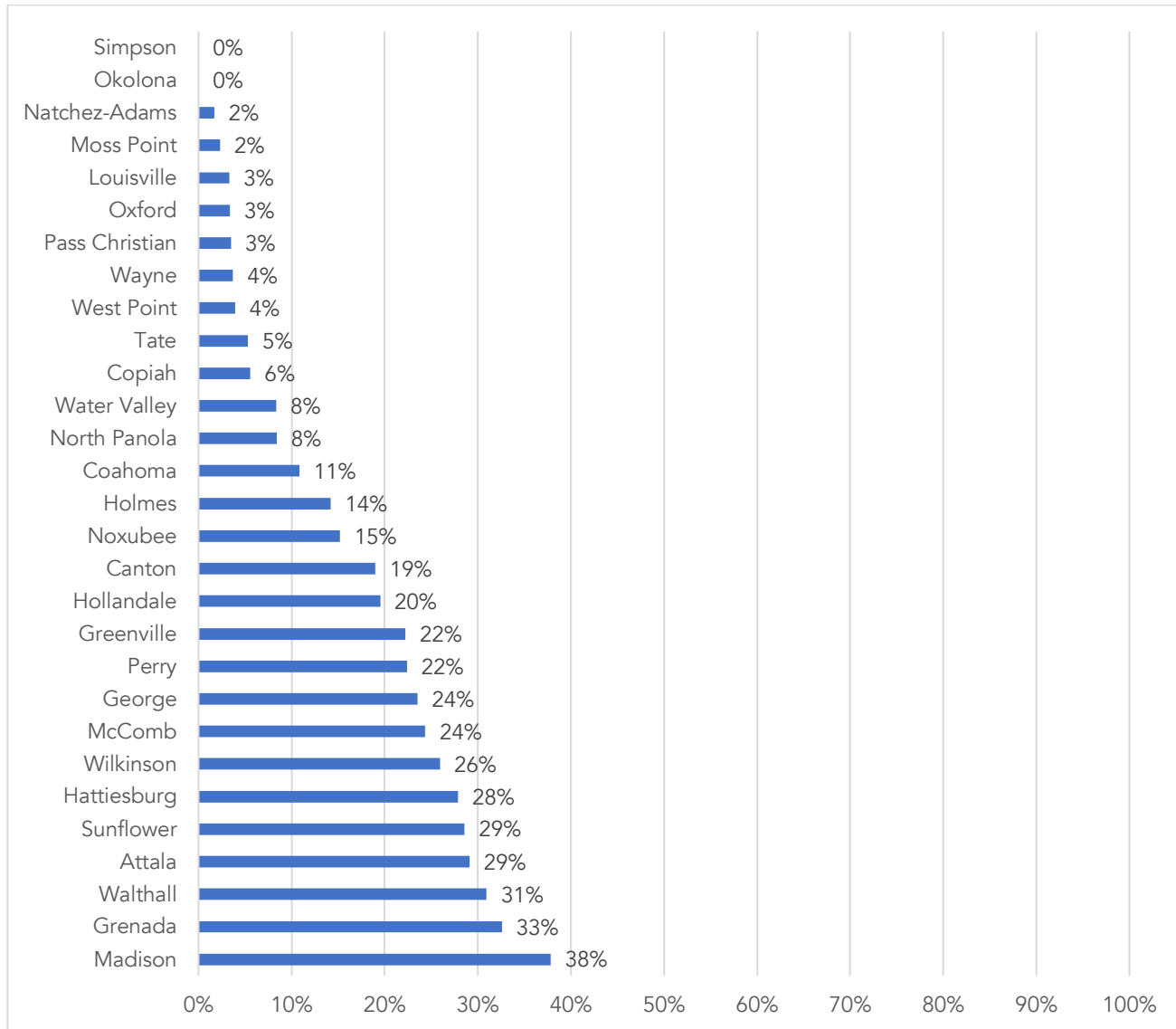


Note: Data were not reported or were not available for the following district: Yazoo County.

English Language Arts Benchmark Assessment Bubble Analysis by District and Grade

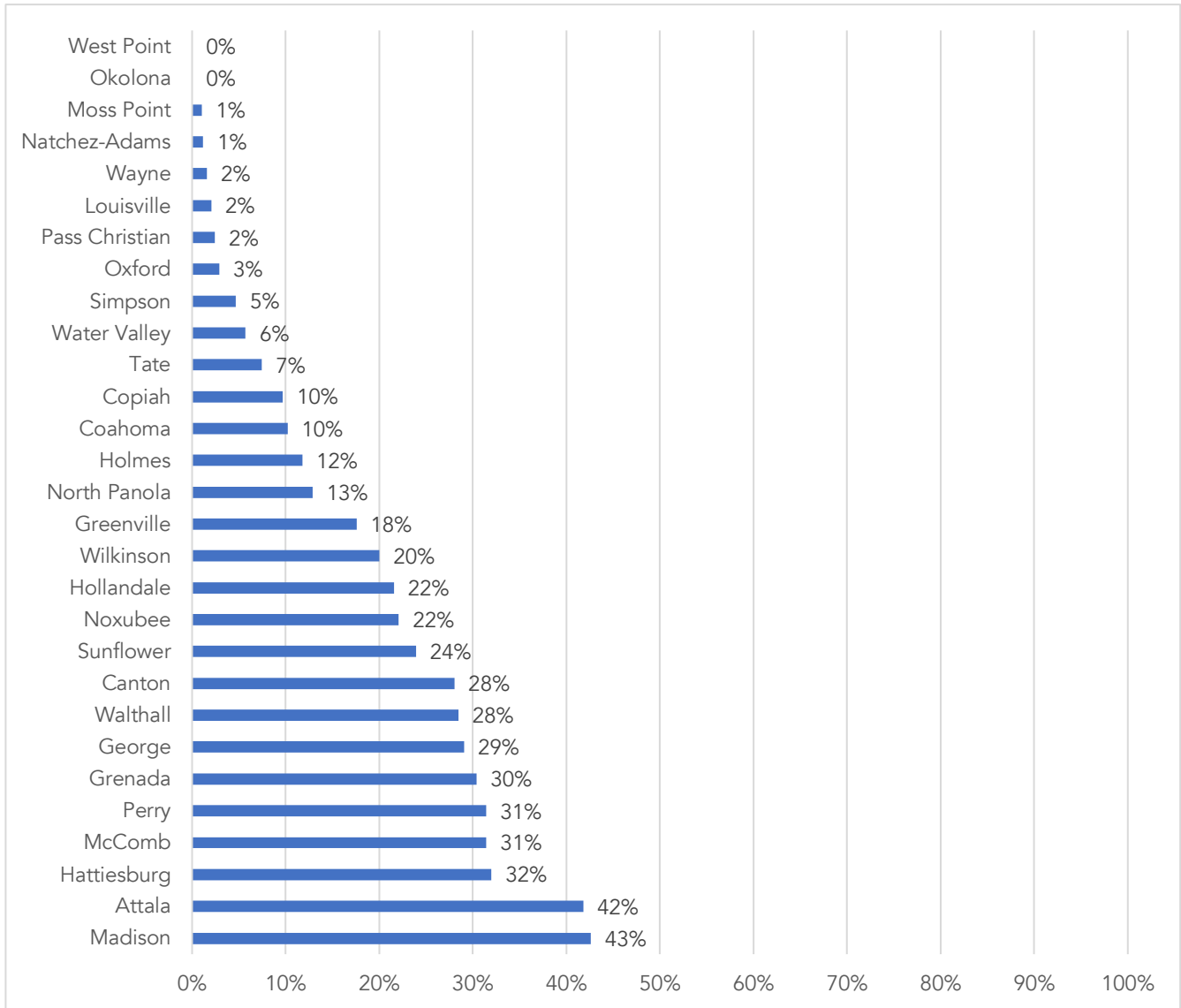
Exhibits 51 through 56, pages 56 through 61, show the percentages of bubble ELA students in the districts reporting on the end-of-year district assessment by grade level (3rd through 8th).

Exhibit 51: Percentage of 3rd Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment



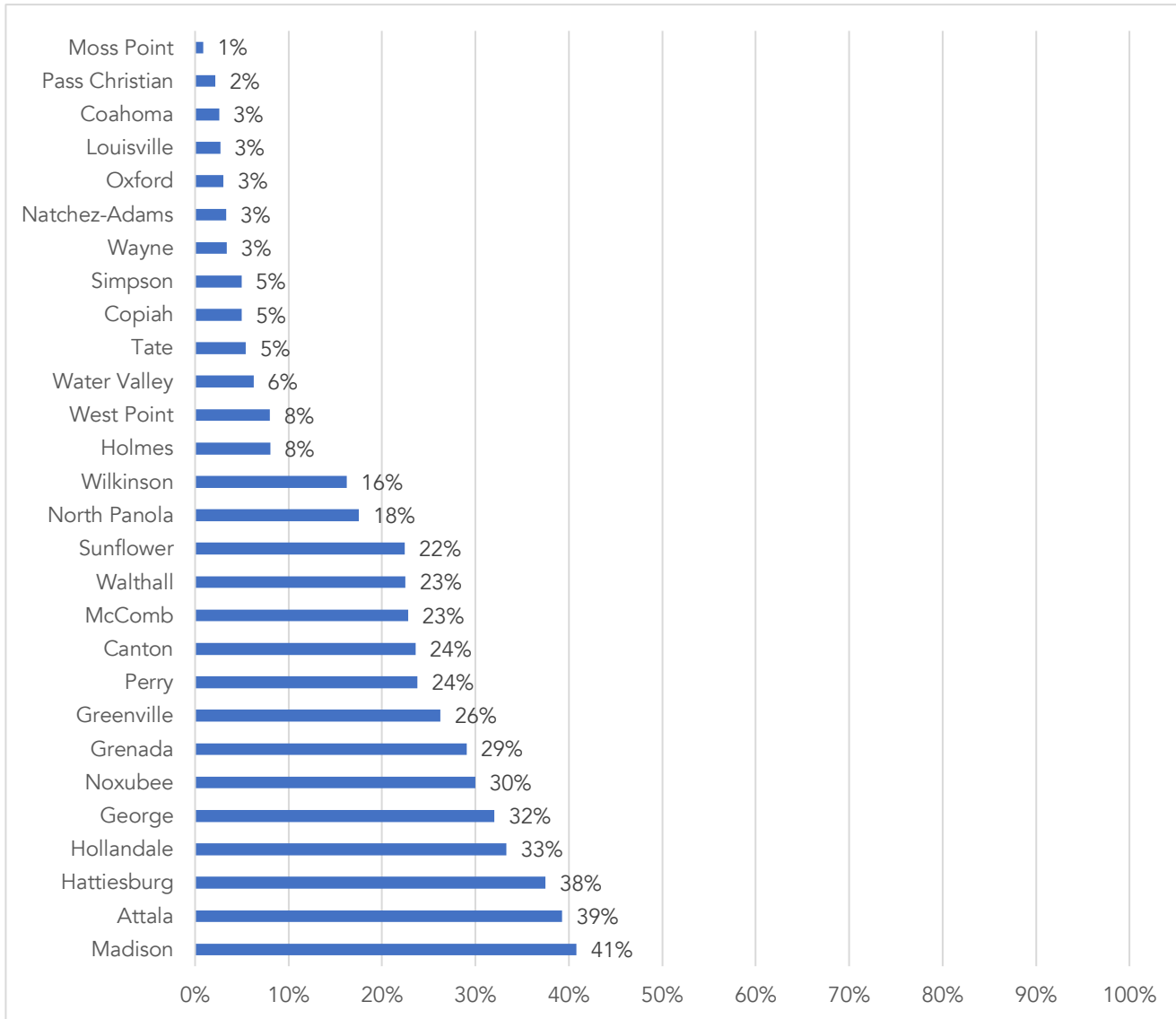
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 52: Percentage of 4th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment



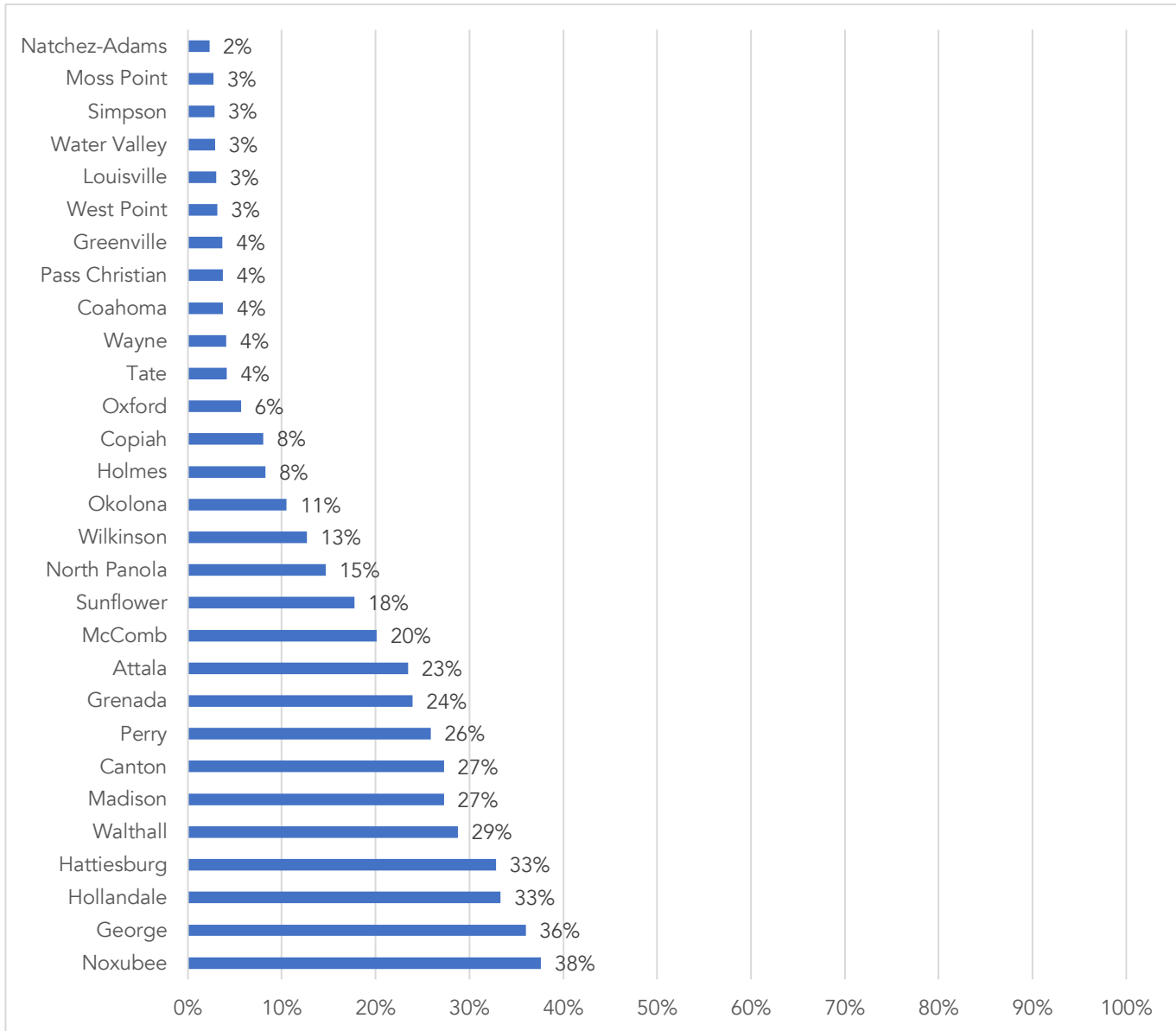
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 53: Percentage of 5th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment



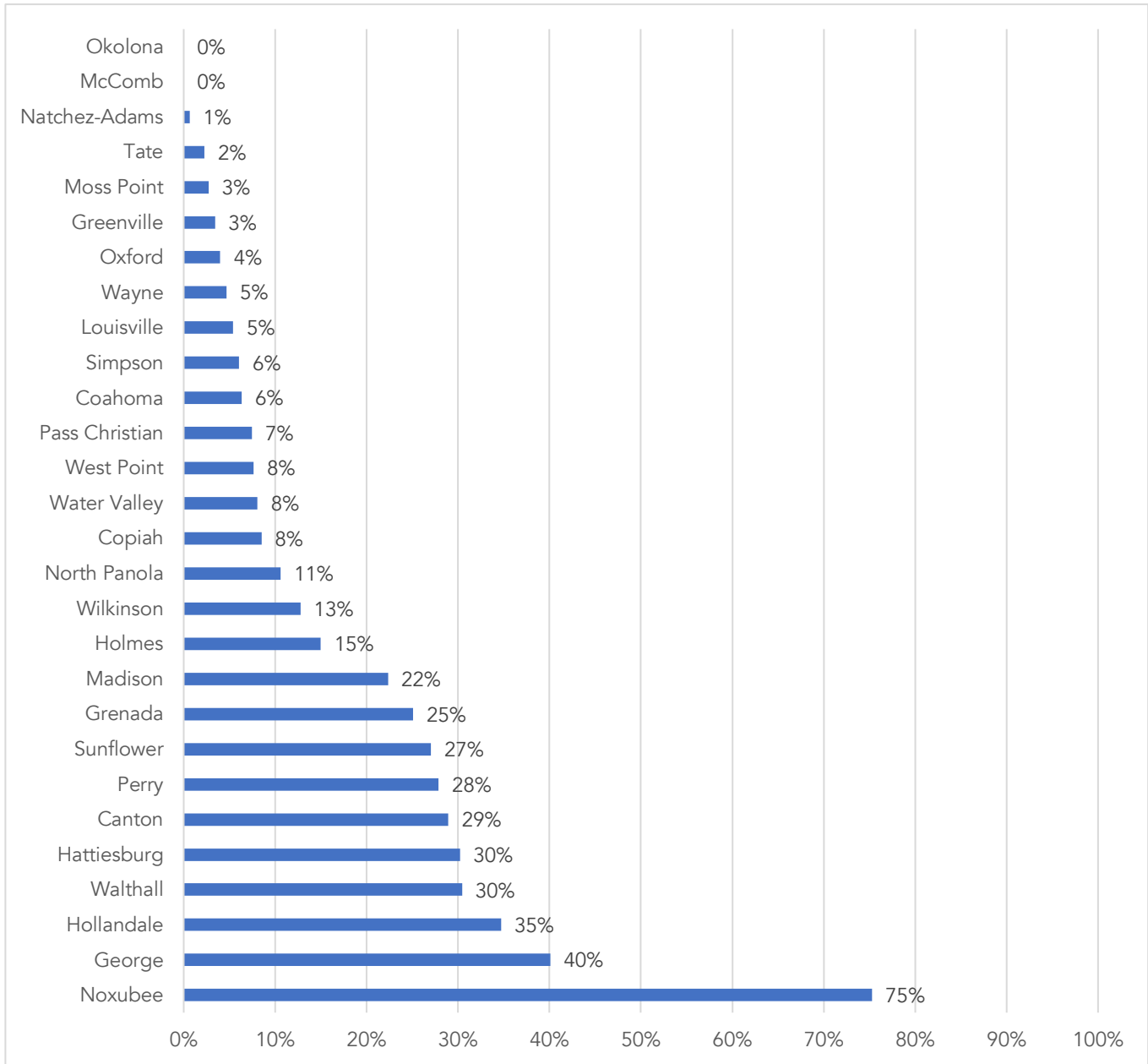
Note: Data were not reported or were not available for the following districts: Yazoo County and Okolona.

Exhibit 54: Percentage of 6th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment



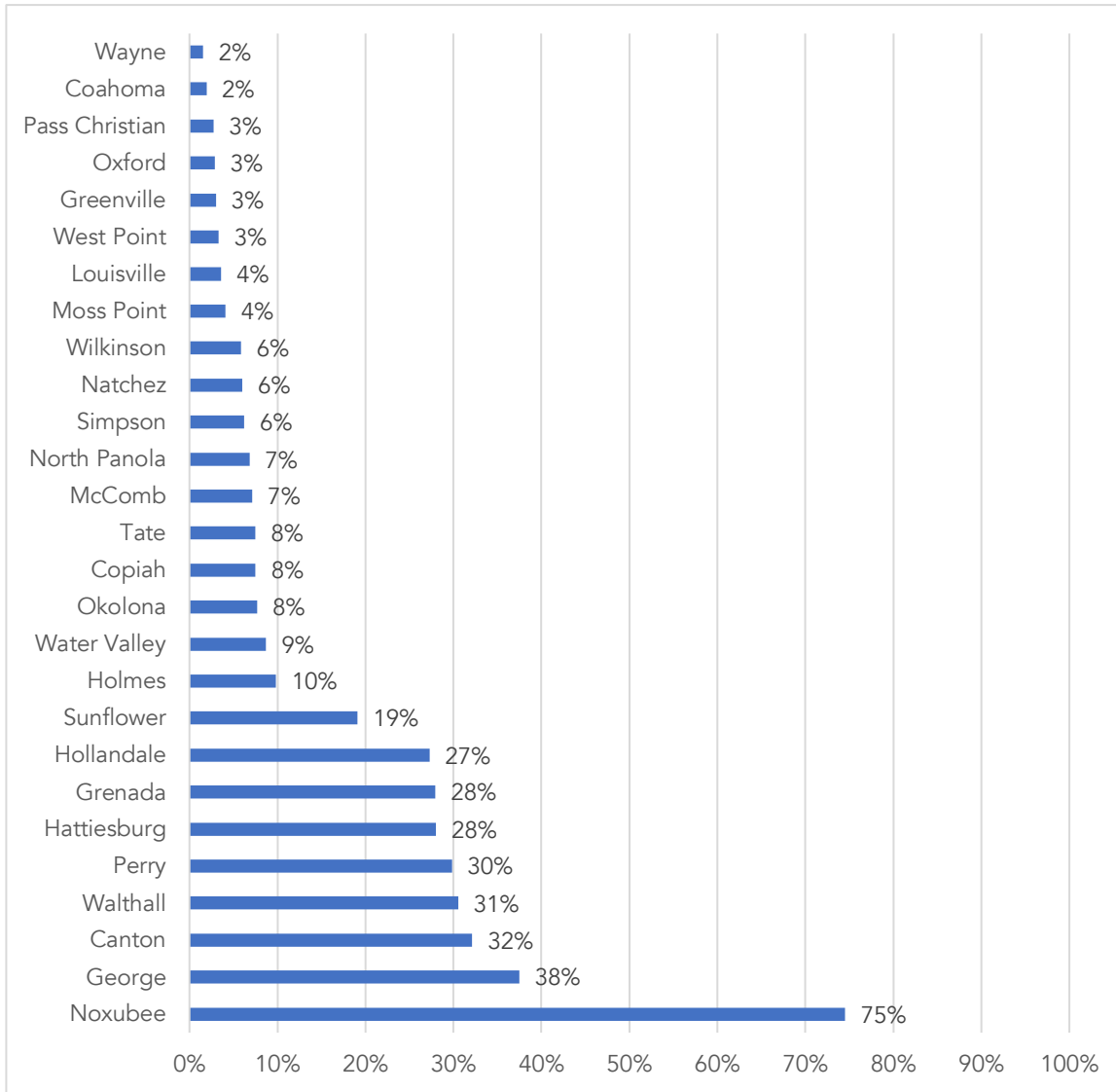
Note: Data were not reported or were not available for the following district: Yazoo County.

Exhibit 55: Percentage of 7th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment



Note: Data were not reported or were not available for the following districts: Yazoo County and Attala.

Exhibit 56: Percentage of 8th Grade ELA Bubble Students on the 2022-2023 Benchmark Assessment



Note: Data were not reported or were not available for the following districts: Yazoo County and Attala.

Recommendations Regarding Bubble Student Analysis

The following recommendations, when properly implemented, could help schools and districts systematically identify, mitigate, and address the challenges associated with proficiency and bubble students, thereby improving overall student outcomes and enhancing the effectiveness of the educational process.

1. **Assign Responsibility:** Allocate a person or team to manage the proficiency and bubble student analysis process. They would coordinate the analysis, create reports, and facilitate strategy meetings.
2. **Use Suitable Software or Processes:** Employ a software application or process that effectively generates proficiency and bubble student analysis. The tools used should be timely and accurate in identifying students who are on the cusp of proficiency.
3. **Develop Detailed Reports:** Create comprehensive reports at different levels (i.e., district, school, grade, and classroom). These reports should highlight the proficiency status of students and identify those in the bubble category, helping administrators make informed instructional decisions.
4. **Longitudinal Analysis:** Conduct longitudinal proficiency and bubble student analysis to understand whether issues are acute or chronic. This analysis will help in identifying persistent gaps and forming strategies to address them over time.
5. **Periodic Review Meetings:** Organize administrative review meetings with district leadership to discuss findings, strategize, and plan corrective actions. This collaborative approach will help in formulating effective solutions.
6. **Annual Evaluation of Strategies:** Review mitigation strategies every year to identify effective practices and areas that need improvement. This will allow for the continuous refinement and enhancement of strategies.
7. **Tagging and Tracking Bubble Students:** Identify bubble students--those who are on the verge of proficiency--and track them as a specific cohort each year. These students should receive additional support to help them maintain progress and achieve proficiency.
8. **Invest in Support Resources:** Allocate resources to support bubble students. This could include additional tutoring, personalized learning plans, and after-school programs designed to help these students attain and maintain proficiency.
9. **Professional Development for Teachers:** Provide training for teachers on how to support bubble students. This could include strategies for differentiated instruction and progress monitoring and providing feedback that promotes growth.
10. **Parental Engagement:** Engage parents in the process, as they can play a significant role in supporting their child's learning at home. This could include providing parents with resources and strategies to help their child achieve proficiency.
11. **Peer Support Programs:** Implement peer tutoring or mentoring programs. Peer support can be beneficial in helping bubble students gain confidence and improve their academic performance.
12. **Continuous Assessment and Feedback:** Regularly assess students' progress and provide them with constructive feedback. This will help bubble students understand their strengths and areas for improvement and motivate them to work toward proficiency.

Resource Implementation Fidelity

Resource implementation fidelity refers to the extent to which districts implement an education program or practice as planned or intended by developers and involves maintaining the integrity of instructional methods, curriculum design, and education resources with the goal of ensuring these items are not arbitrarily modified or diluted during the delivery process. Deviations from intended use and delivery methods may compromise the effectiveness of the educational program or resource and negatively impact students' educational preparedness. To measure resource implementation fidelity, GlimpseK12 researchers compared students' performance in metrics such as time spent in the resource, questions answered, or lessons completed to the resource vendor's recommendations for appropriate usage. For the 2022-2023 school year and for students in grades 3rd through 8th in the districts reporting, 44% and 47% of students met the resource implementation fidelity thresholds in Math and English Language Arts, respectively, while 39% and 35% of students did not meet at least 50% of the resource implementation fidelity threshold in Math and English Language Arts, respectively.

Resource implementation fidelity, the degree to which educational programs and practices are delivered as intended by the developers, plays a critical role in K-12 education. The aim of this study is to outline the importance of resource implementation fidelity and the utilization of educational resources as intended, focusing on the implications for educational outcomes and the maximization of the benefits derived from these resources.

The education sector is continually evolving, with new pedagogical strategies, technologies, and resources introduced regularly. These resources are developed with specific intentions and instructions for use to optimize their potential and contribute to student learning. The correct implementation of these resources is therefore crucial for ensuring that they are used to their fullest potential and that educational outcomes align with anticipated goals.

Understanding Resource Implementation Fidelity

Resource implementation fidelity refers to the extent to which an educational program or practice is implemented as planned or intended. It involves maintaining the integrity of instructional methods, curriculum design, and educational resources, ensuring that they are not arbitrarily modified or diluted during the delivery process. The concept is underpinned by the understanding that any deviation from the intended use may compromise the effectiveness of the educational program or resource, leading to less than desired results or suboptimal student outcomes.

Importance of Resource Implementation Fidelity

Resource implementation fidelity is critical to the success of educational programs and the optimal utilization of resources for several reasons:

- **Effectiveness:** Educational programs and resources are developed based on pedagogical theories and empirical evidence. Implementing them with high fidelity ensures that the educational strategies that have been proven effective are carried out as intended, thereby maximizing their potential impact on student learning.
- **Accountability:** With high stakes associated with student outcomes, there is a need for transparency and accountability in education. Resource implementation fidelity allows for an accurate evaluation of a program or resource's effectiveness, as it ensures the outcomes are a reflection of the program or resource as intended, not a variant.

- **Consistency:** Implementing educational programs and resources with fidelity promotes consistency in education delivery. This consistency is crucial in maintaining equity among students, regardless of their geographical location or socio-economic status.
- **Cost-Effectiveness:** Education resources, particularly those involving technology, can be costly. Ensuring that these resources are used as intended can maximize their return on investment and reduce waste of resources.

Challenges and Strategies for Enhancing Resource Implementation Fidelity

Despite the benefits, achieving high resource implementation fidelity can be challenging due to factors such as:

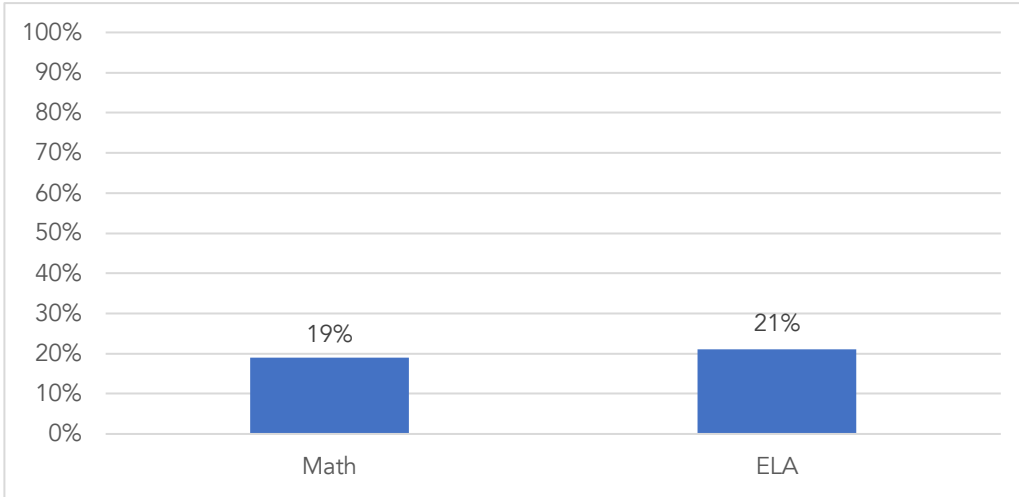
- insufficient resources to implement the initiative fully;
- inadequate training; or,
- resistance to change among educators.

It is therefore essential to have strategies in place to support the proper use of educational resources. These strategies may include professional development programs focused on the intended use of new resources, maintaining an ongoing monitoring and feedback system to ensure adherence to program guidelines, and the fostering of a supportive culture that values fidelity of resource implementation.

In summary, resource implementation fidelity is a critical element in K-12 education that ensures the maximization of benefits from educational resources. By emphasizing the correct usage of these resources and implementing them as intended, school districts enhance the quality of education and ensure that taxpayer investments yield the desired outcomes. The importance of resource implementation fidelity cannot be overstated in the pursuit of educational excellence.

Exhibit 57 on page 65 shows the percentage of districts reporting that had at least 75% of their students meeting the resource implementation fidelity threshold recommended by the vendor for Math and ELA resources in 3rd through 8th grades in school year 2022-2023. The resource implementation fidelity threshold used was taken from the resource vendor's recommendation for appropriate usage. This is typically time on task or questions/lessons completed.

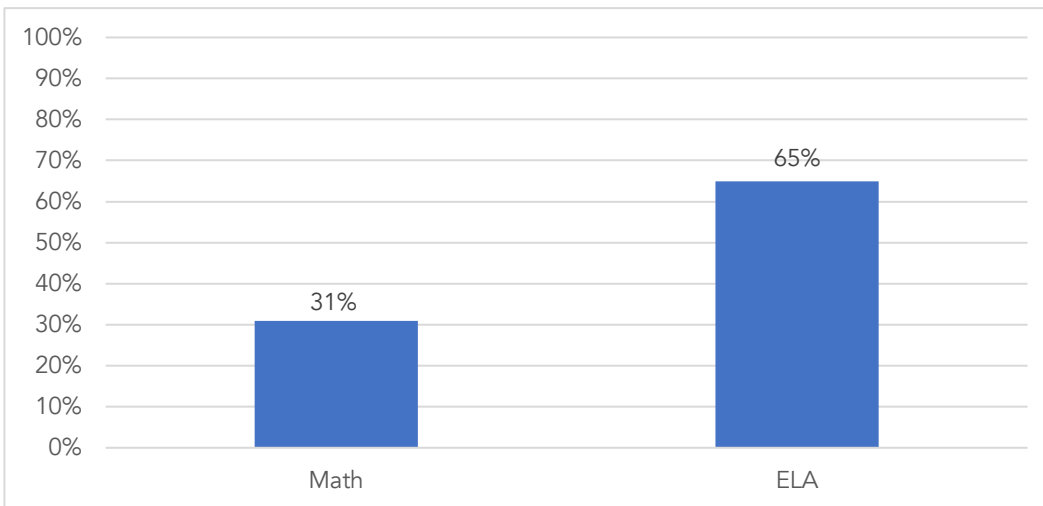
Exhibit 57: Percentage of Districts in Which at Least 75% of Students Met the Implementation Fidelity Threshold, Math and ELA



Note: Data were not reported or were not available for the following districts: Coahoma (ELA), Noxubee (Math and ELA), Okolona (Math), Simpson (Math and ELA), Tate (ELA), Water Valley (ELA), and Yazoo County (Math).

Exhibit 58 on page 65 shows the percentage of districts reporting that had a minimum of 75% of students meeting at least 50% of the resource implementation fidelity threshold in 3rd through 8th grades in school year 2022-2023.

Exhibit 58: Percentage of Districts in Which at Least 75% of Students Met 50% of the Implementation Fidelity Threshold (Partial), Math and ELA



Note: Data were not reported or were not available for the following districts: Coahoma (ELA), Noxubee (Math and ELA), Okolona (Math), Simpson (Math and ELA), Tate (ELA), Water Valley (ELA), and Yazoo County (Math).

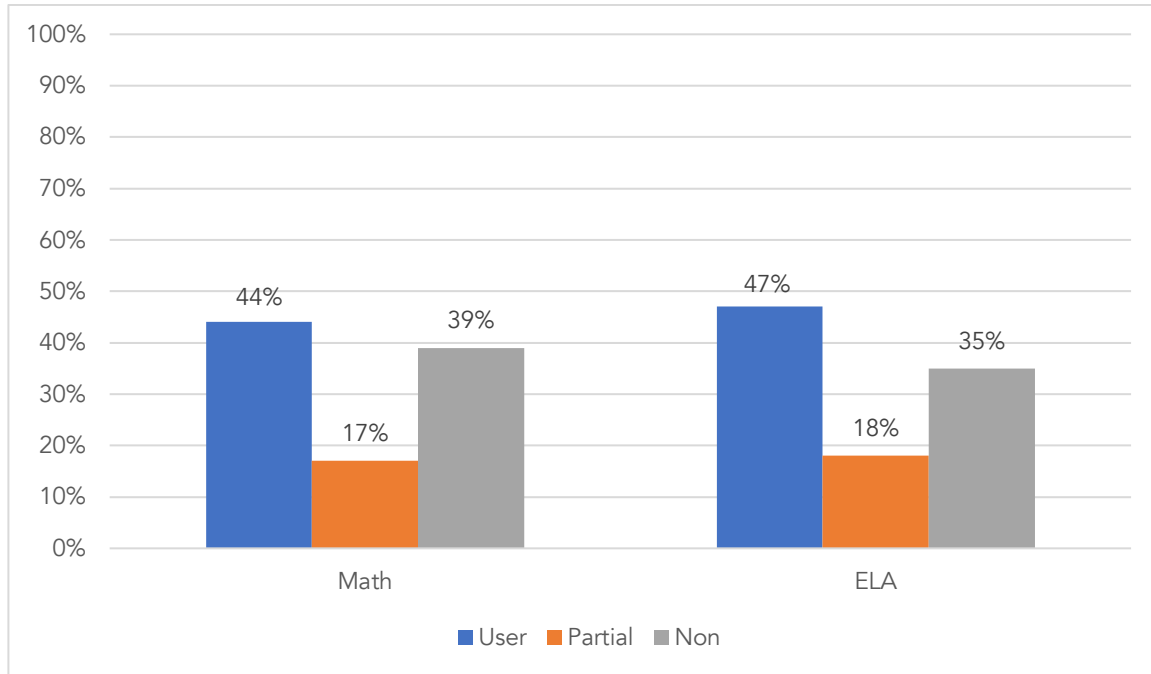
Resource implementation fidelity is typically on a continuum of varying degrees of usage. In further analysis, each of the reviewed districts' resource implementation fidelity was categorized into tiers, in one of three ways:

- users: students that met the resource implementation fidelity threshold;
- partial: students that met at least 50% of the resource implementation fidelity threshold; or,

- non-users: students that did not meet at least 50% of the resource implementation fidelity threshold.

Exhibit 59 on page 66 shows the percentage of students in each of the three resource implementation fidelity tiers in 3rd through 8th grades for all districts reporting combined in school year 2022-2023.

Exhibit 59: Percentage of Students in Each Resource Implementation Fidelity Tier

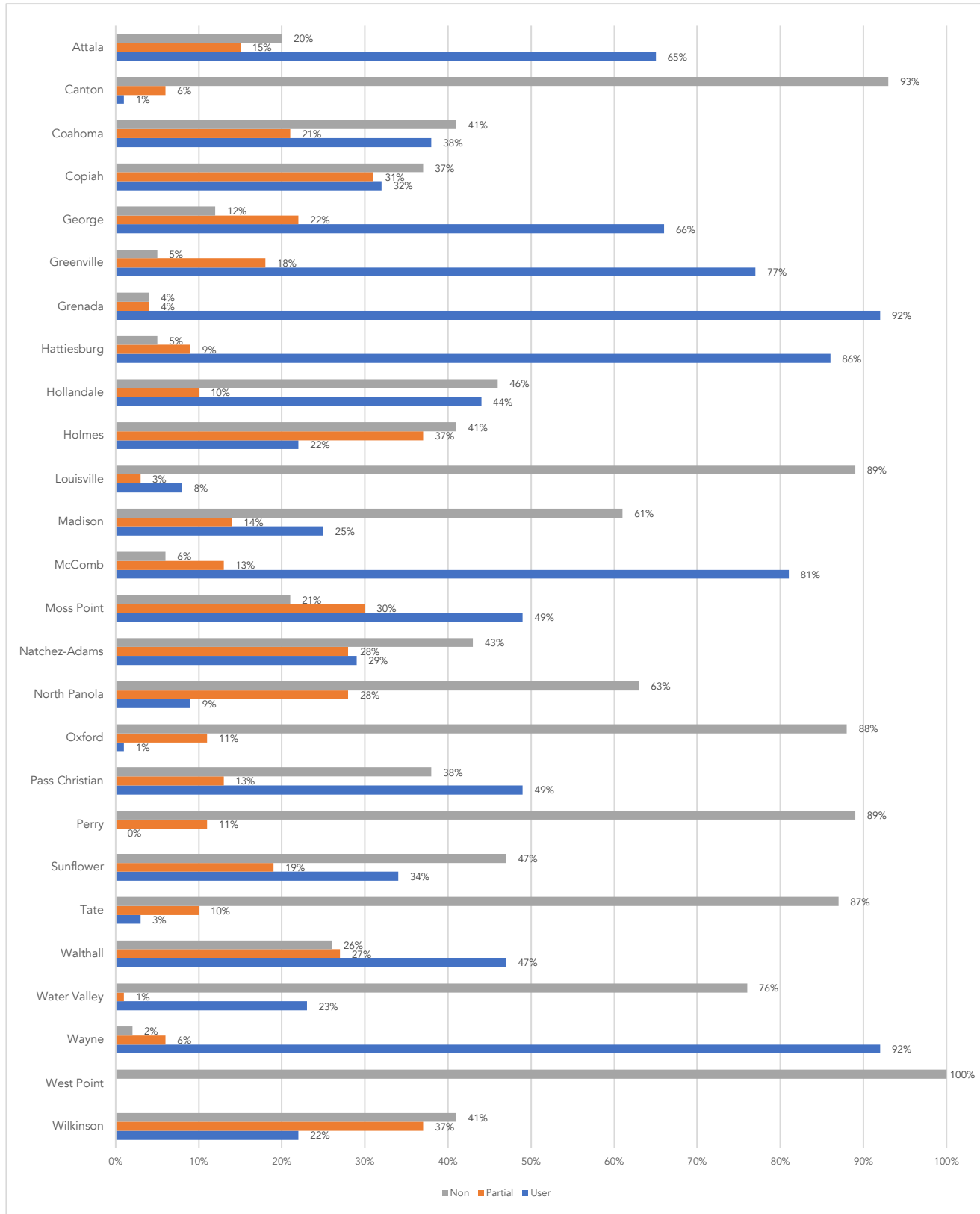


Note: Data were not reported or were not available for the following districts: Coahoma (ELA), Noxubee (Math and ELA), Okolona (Math), Simpson (Math and ELA), Tate (ELA), Water Valley (ELA), and Yazoo County (Math).

Cohort Breakdown

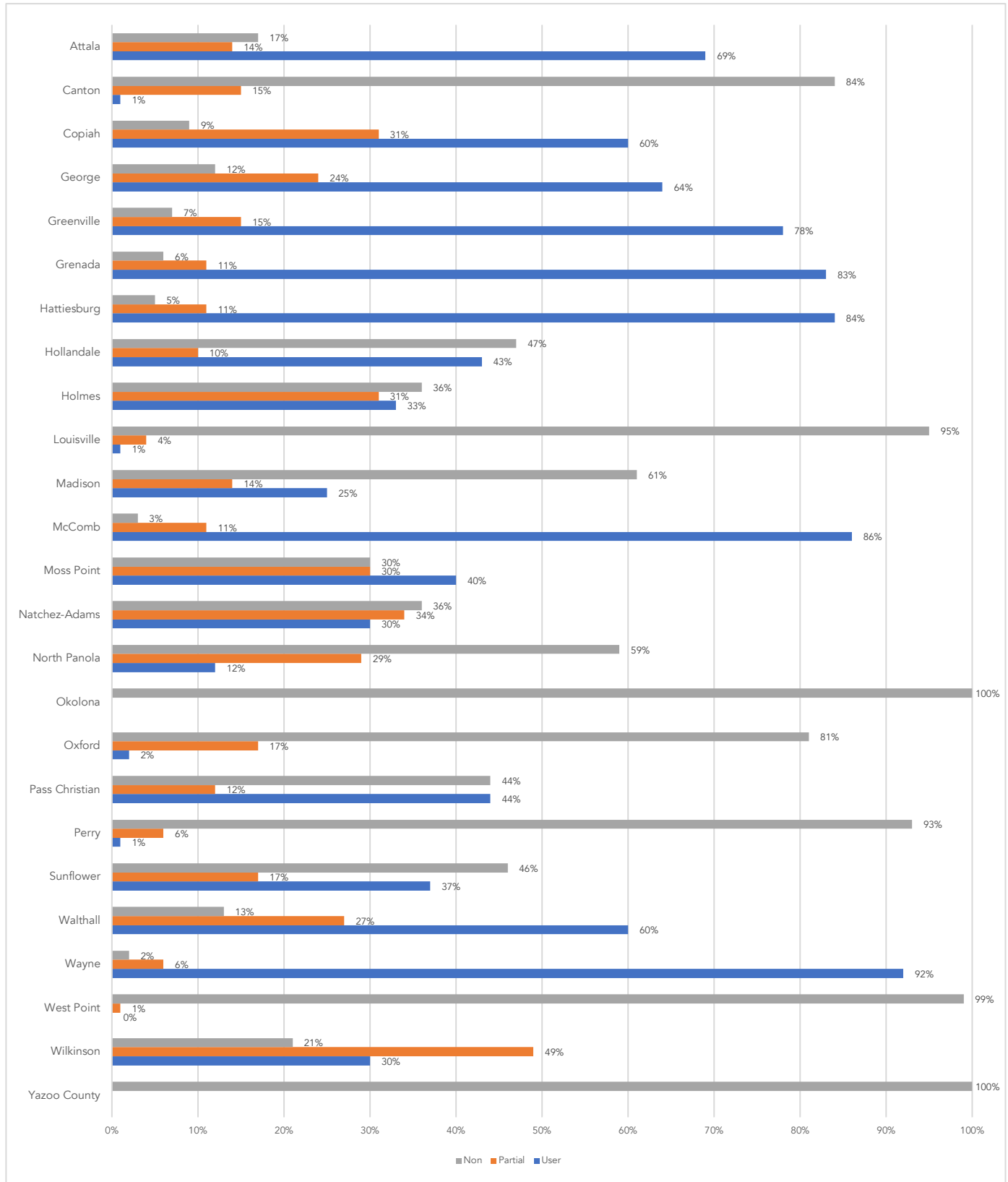
Using the same three-tier categorization of resource implementation fidelity, Exhibit 60, page 67, shows the resource implementation fidelity tier breakdown for Math in the districts reporting by district in 3rd through 8th grades for school year 2022-2023. Exhibit 61 on page 68 shows the resource implementation fidelity tier breakdown for ELA in the districts reporting by district in 3rd through 8th grades for school year 2022-2023.

Exhibit 60: Percentage of Math Students in Each Resource Implementation Fidelity Tier by District



Note: Data were not reported or were not available for the following districts: Noxubee, Okolona, Simpson, and Yazoo County.

Exhibit 61: Percentage of ELA Students in Each Resource Implementation Fidelity Tier by District



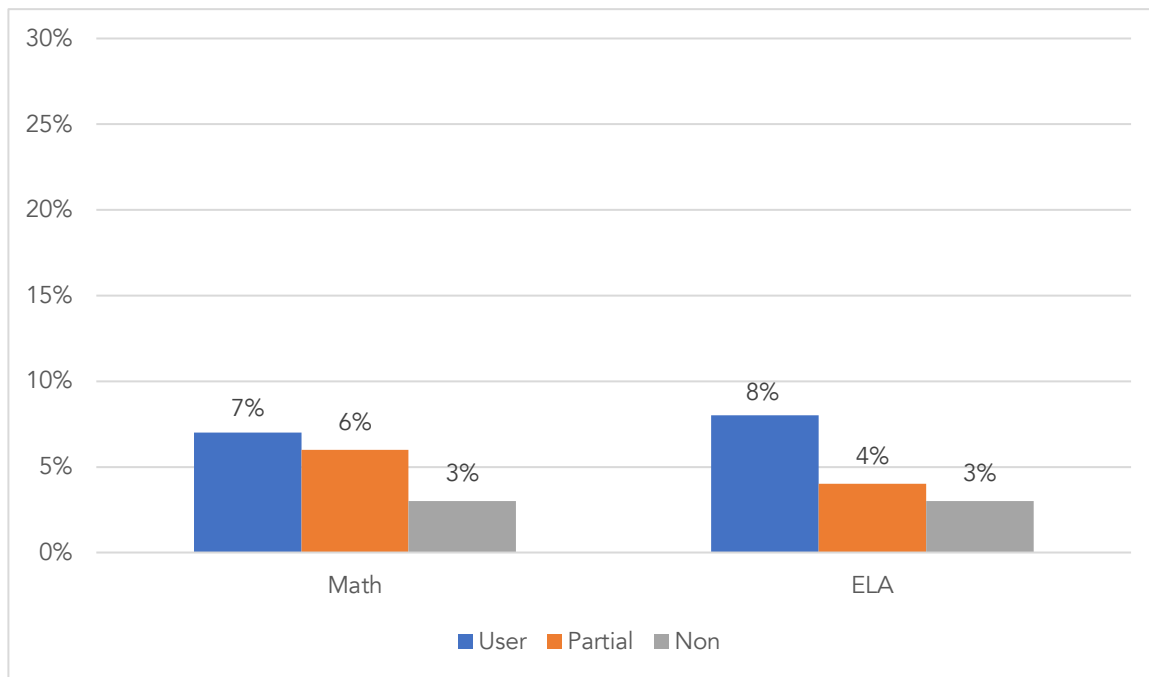
Note: Data were not reported or were not available for the following districts: Coahoma, Noxubee, Simpson, Tate, and Water Valley.

Growth Analysis of Resource Implementation Fidelity Tiers

As noted previously, resource implementation fidelity is key to ensuring students receive the maximum benefit possible from education resources. Exhibit 62, page 69, shows the percentage of 3rd through 8th graders' growth in Math and ELA on the intra-year benchmark assessment (Pre to Post) for students in each of the implementation fidelity tiers in the districts reporting in school year 2022-2023. Ideally, when resources are research-backed, well aligned with student needs, and implemented with fidelity and accurately, district administrators should see greater growth for the students exposed to the resource than for those students that are not. In instances where this is not the case, districts should evaluate the alignment of the resources to student needs to ensure they receive the maximum benefit from the resource and minimize the amount of funds that are allocated to ineffective spending.

Exhibit 62 shows that the user group had more growth than both the partial and non-user implementation tiers in the districts reporting for the 2022-2023 school year.

Exhibit 62: Percentage Student Growth in Each Resource Implementation Fidelity Tier by Subject (Math and ELA)



Note: Data were not reported or were not available for the following districts: Coahoma (ELA), Noxubee (Math and ELA), Okolona (Math), Simpson (Math and ELA), Tate (ELA), Water Valley (ELA), and Yazoo County (Math).

Recommendations to Address Resource Implementation Fidelity

To improve resource implementation fidelity, districts should:

1. **Monitor:** Maintain a process or software application to monitor closely the resource implementation fidelity and effectiveness of all purchased resources.
2. **Align Goals and Outcomes:** Strategically align resources to goals and outcomes to ensure proper monitoring takes place.
3. **Communicate:** Communicate expectations to faculty and staff at the beginning of each school year.
4. **Evaluate:** Conduct intra-year evaluation of resource implementation fidelity and effectiveness.
5. **Take Corrective Actions:** Implement corrective actions as necessary to improve resource implementation fidelity and effectiveness.
6. **Implement Accountability:** Hold school administrators and faculty accountable for effective implementation to ensure resource effectiveness is maximized for students and ineffective spending is reduced.

Appendix: List of School Districts Included in This Review

1. Attala
2. Canton
3. Coahoma
4. Copiah
5. George
6. Greenville
7. Grenada
8. Hattiesburg
9. Hollandale
10. Holmes
11. Louisville
12. Madison
13. McComb
14. Moss Point
15. Natchez-Adams
16. North Panola
17. Noxubee
18. Okolona
19. Oxford
20. Pass Christian
21. Perry
22. Simpson
23. Sunflower
24. Tate
25. Walthall
26. Water Valley
27. Wayne
28. West Point
29. Wilkinson
30. Yazoo County

SOURCE: PEER.

James F. (Ted) Booth, Executive Director

Reapportionment

Ben Collins

Administration

Kirby Arinder

Stephanie Harris

Gale Taylor

Quality Assurance and Reporting

Tracy Bobo

Hannah Jane Costilow

Performance Evaluation

Lonnie Edgar, Deputy Director

Jennifer Sebren, Deputy Director

Drew Allen

Emily Cloys

Kim Cummins

Matthew Dry

Matthew Holmes

Drew Johnson

Billy Loper

Debra Monroe

Taylor Mullins

Meri Clare Ringer

Sarah Williamson

Julie Winkeljohn

Ray Wright