Memorandum

To: Cynthia McCarty, Alabama STEM Council, Acting Director
Elizabeth Mohr, Alabama Department of Workforce, Operations Manager

From: Human Resources Research Organization (HumRRO)

Date: October 30, 2026

Re: ANA Evaluation Quarterly Memo

HumRRO's evaluation examines the extent to which the Alabama Numeracy Act (ANA) is being implemented as intended and whether implementation is producing the desired outcomes for students in grades K–5. The evaluation includes process and outcome components as well as eight supplemental studies. This memo provides a status of activities completed from July through September 2026.

Status of Evaluation Activities

Outcome Evaluation

The expected delivery date for the SY2025–26 outcome data from the Alabama State Department of Education (ALSDE) was mid-September 2026. However, the data delivery was delayed until October 14, 2026. Activities related to cleaning, processing, and analyzing the data were, in turn, delayed until October.

Alabama Multi-Tiered System of Supports (AL-MTSS) Study

The AL-MTSS study examines the extent to which (a) the Alabama Framework for MTSS is being implemented in grades K–5 and (b) ratings of MTSS implementation within schools relate to the distribution of students within tiered placements. Data were collected through targeted school leader interviews, administrative records, the annual survey, and focus groups. We completed the following study activities July through September:

- Conducted preliminary analyses of annual survey data and planned for creating composite measures of MTSS implementation to link with student outcomes data.
- Developed summary memo of key findings from MTSS interviews with sample of school leaders from FS/LS schools.
- Worked with OMI staff to secure tiered placement data from PowerSchools for analysis of tier 3 use and supports across schools.

Comparison Study

The comparison study uses quasi-experimental design (QED) procedures to assess the impact of math coaches on student math performance in full-support (FS) and limited-support (LS) schools. We completed the following study activities from July through September 2026:

- Worked with OMI to receive SY2025–26 final coach assignments, school coach allocations, and coach dashboards.
- Conducted preliminary cleaning of the SY2025–26 final coach assignments. Upon receipt of the final school designations (to be delivered with the outcome data), the final coach

assignments will be finalized and HumRRO will explore design options that will allow for an appropriate and accurate examination of math coach impact on student math performance.

For SY2024–25, HumRRO identified a sufficient number of schools without a math coach to serve as a matched comparison group. However, as Alabama continues to expand math coach assignments statewide, it may be difficult to identify a sufficient number of SY2025–26 comparison schools.

Cost Effectiveness Analysis Study

The cost effectiveness analysis study examines the overall costs and actual or anticipated benefit of investing in the ANA for student math achievement. We completed the following study activities July through September:

- Collected and reviewed preliminary information about key ANA cost drivers, including funds allocated to each SY2025–26 budget category.
- Analyzed annual survey data describing use and frequency of local ANA implementation-related funds.

Math Coach Study

The math coach study examines the relationship between principals' and regional coordinators' evaluations of math coach performance and differences in student math achievement. We completed the following study activities from July through September:

- Conducted preliminary cleaning of the SY2025–26 final coach assignments and characteristics. Upon receipt of the final school designations (to be delivered with the outcome data), the final coach assignments and allocations will be finalized.
- Conducted preliminary cleaning of coach dashboard data from designated schools. These data will provide implementation data regarding the number of minutes that coaches recorded spending on different coaching activities and will be used to examine the relationship between coach time allocations and student math achievement.

Screening Assessments Study

The screening assessments study examines the extent to which required screening assessments accurately identify students who subsequently receive tiered services or a diagnosis related to a math deficiency.[1] We completed the following study activities from July through September:

- Separately analyzed data from FS/LS principals and FS/LS K–5 teachers regarding their input on how they and their schools use data from the early numeracy screening assessments to assign students to tiered instruction; identified key findings for each stakeholder type.

[1] Alabama's EMTF-approved early numeracy screening assessments include Curriculum Associates' i-Ready Diagnostic and Interview Tool and Forefront's K–2 Numeracy Screener. Alabama's only EMTF-approved fractional reasoning screening assessment is Forefront's Fractional Reasoning Screener. The early numeracy screening assessments were administered operationally during SY2025–26; however, the fractional reasoning screening assessment was pilot tested during SY2025–26, so operational data will be available for SY2026–27.

- Triangulated survey and focus group key findings across regional coordinators, district/LEA staff, math coaches, and K–5 teachers to identify common and unique key themes regarding how data from the early numeracy screening assessments are used to assign students to tiered instruction.
- Presented preliminary study key findings to STEM Council and OMI/ALSDE staff.
- Prepared draft narrative description and tables of key study findings for the Year 4 annual report appendix.
- Worked with OMI/ALSDE staff to receive SY2025–26 student screening/diagnostic assessment data and tiered services/math-related diagnosis classifications.

Stakeholder Awareness & Satisfaction Study

The awareness and satisfaction study examines the extent to which stakeholders are aware of ANA (parents only) and satisfied with its implementation. We completed the following study activities from July through September:

- Separately analyzed data from FS/LS principals and FS/LS K–5 teachers regarding their perceived satisfaction with ANA and its implementation; identified key findings for each stakeholder type.
- Triangulated survey and focus group key findings across parents, regional coordinators, district/LEA staff, math coaches, and K–5 teachers to identify common and unique key themes regarding stakeholder awareness of ANA and perceived satisfaction with ANA's implementation.
- Presented preliminary study key findings to STEM Council and OMI/ALSDE staff.
- Prepared draft narrative description and tables of key study findings for the Year 4 annual report appendix.

Teacher Math Knowledge and Pedagogy Study

The teacher math knowledge and pedagogy study examines the status of and changes in K–5 teachers' math content knowledge and pedagogical skills over time. We completed the following study activities from July through September:

- Separately analyzed data from regional coordinators, district/LEA staff, math coaches, and FS/LS principals regarding (a) K–5 teachers' knowledge of state math content standards, (b) differences between certified and non-certified teachers' gaps in knowledge about certain state content standards, and (c) differences in math instruction between teachers with more and less formal training; identified key findings for each stakeholder type.
- Prepared draft narrative description and tables of key study findings for the Year 4 annual report appendix.
- Conducted preliminary analyses of annual survey data to provide contextual information for teacher knowledge study.
- Programmed the annual administration of the Mathematics for Teaching Tool, a validated measure of teachers' math knowledge for teaching and instructional practices (see Ball et al., 2008). The MTT will be administered to K–5 teachers in FS/LS schools beginning October 8, 2026 (65 responses as of 10/13).

Unintended Consequences Study

This study examines the unintended positive and negative outcomes that have emerged from implementing the ANA. We completed the following study activities from July through September:

- Separately analyzed data from FS/LS principals and FS/LS K–5 teachers regarding their feedback about positive and negative outcomes resulting from ANA implementation; identified key findings for each stakeholder type.
- Triangulated survey and focus group key findings across parents, regional coordinators, district/LEA staff, math coaches, and K–5 teachers to identify common and unique key themes regarding their perceptions of positive and negative outcomes resulting from ANA implementation.
- Presented preliminary study key findings to STEM Council and OMI/ALSDE staff.
- Prepared draft narrative description and tables of key study findings for the Year 4 annual report appendix.

Remaining FY2026 Evaluation Activities

Attachment A presents the planned Year 4 general, process, and outcome evaluation activities and Attachment B presents the planned Year 4 supplemental studies activities.

Attachment A: Planned Year 4 General, Process, and Outcome ANA Evaluation Activities[2]

Year 4 Timing	General Evaluation Activities	Process Evaluation Activities	Outcome Evaluation Activities
Jan – Mar 2026	Weekly meetings with OMI/ALSDE Biweekly supplemental study meetings with OMI/ALSDE Monthly meetings with STEM Council Executive Director Monthly HumRRO-Mathematica team meetings Refine/Update ANA evaluation data tracking system Finalize Year 3 annual report Disseminate Year 3 annual report (March 30, 2026) to designated individuals	Prepare process evaluation section of Year 3 annual report Refine Year 4 annual survey to measure quality/effectiveness of ANA implementation processes and activities; survey to include parallel versions for specifics stakeholder groups (regional coordinators, district/LEA staff, FS/LS principals, math coaches, FS/LS K–5 teachers) Work with OMI/ALSDE to whitelist Year 4 annual survey URL in FS and LS schools Administer Year 4 annual survey to five major stakeholder groups (regional coordinators, district/LEA staff, FS/LS principals, math coaches, FS/LS K–5 teachers) Refine protocols for parent and student focus groups (FGs) Plan/schedule spring 2026 in-person FGs with parents and students Conduct in-person FGs with parents and students in 3 FS schools and 3 LS schools Refine protocols for conducting spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches; sessions will elaborate on and/or clarify survey findings	Clean and merge SY2024–25 student, teacher, and school outcome datasets; review quality of data for meeting assumptions of proposed analyses (e.g., normality, linearity) Conduct analyses of SY2024–25 outcome data, separately by metric as appropriate Prepare description of SY2024–25 outcome findings (narrative and tables) Prepare outcome evaluation section of Year 3 annual report

[2] Shaded text indicates completed activities.

Year 4 Timing	General Evaluation Activities	Process Evaluation Activities	Outcome Evaluation Activities
		Plan/schedule spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches Begin conducting spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches	
Apr – June 2026	Weekly meetings with OMI/ALSDE Biweekly supplemental study meetings with OMI/ALSDE Monthly meetings with STEM Council Executive Director Monthly HumRRO-Mathematica team meetings Refine/Update ANA evaluation data tracking system	Clean Year 4 annual survey data Analyze Year 4 annual survey data separately by stakeholder type Prepare description of Year 4 survey findings (narrative, tables) Complete conducting spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches Refine protocols for spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers; sessions to elaborate on and/or clarify survey findings Plan/schedule spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers Conduct spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers Analyze spring 2026 parent and student in-person FG data separately by stakeholder type Analyze spring 2026 regional coordinator, district staff, and math coach virtual FG data separately by stakeholder type	Check with ALSDE periodically regarding status of SY2025–26 outcome data

Year 4 Timing	General Evaluation Activities	Process Evaluation Activities	Outcome Evaluation Activities
July – Sept 2026	Weekly meetings with OMI/ALSDE Biweekly supplemental study meetings with OMI/ALSDE Monthly meetings with STEM Council Executive Director Monthly HumRRO-Mathematica team meetings Refine/Update ANA evaluation data tracking system	Analyze spring 2026 FS/LS principal and FS/LS K–5 teacher virtual FG data separately by stakeholder type Prepare description of parent and student spring 2026 FG findings (narrative, tables) Prepare description of regional coordinator, district staff, and math coach spring 2026 FG findings (narrative, tables) Prepare description of FS/LS principal and FS/LS K–5 teacher spring 2026 FG findings (narrative, tables)	Finalize procedures for receipt of SY2025–26 outcome data Work with ALSDE to receive SY2025–26 outcome data
Oct – Dec 2026	Weekly meetings with OMI/ALSDE Biweekly supplemental study meetings with OMI/ALSDE Monthly meetings with STEM Council Executive Director Monthly HumRRO-Mathematica team meetings Refine/Update ANA evaluation data tracking system Prepare Year 4 annual report; disseminate January 30, 2027	Prepare process evaluation section of Year 4 annual report	Clean and merge SY2025-26 student, teacher, and school outcome datasets Conduct analyses of SY2025–26 outcome data, separately by metric as appropriate Prepare description of SY2025–26 outcome findings (narrative and data visualization/tables); include trends across years as appropriate Prepare outcome evaluation section of Year 4 annual report

Attachment B: Year 4 Planned ANA Supplemental Studies Activities[3]

Year 4 Timing	Math Coach Evaluation and Student Math Achievement	MTSS and Student Math Achievement	Teacher Math Knowledge/Pedagogy and Student Math Achievement
Jan – Mar 2026	Prepare math coach study section of Year 3 annual report	Prepare MTSS section of Year 3 annual report Draft and finalize MTSS questions for Year 4 annual survey Finalize MTSS interview protocol and conduct outreach to select school leaders using principal contact information from OMI-identified schools Review and analyze AIR needs assessment, tiered intervention, survey, and student achievement data; prepare description of findings (narrative and tables) Begin conducting MTSS interviews with select school leaders Draft and finalize MTSS questions for spring 2026 FGs with regional coordinators, district/LEA staff, math coaches, FS/LS principals, and FS/LS K–5 teachers Discuss MTSS questions during spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches	Prepare teacher math knowledge/ pedagogy section of Year 3 annual report Draft and finalize teacher math knowledge/pedagogy questions for Year 4 annual survey Draft and finalize teacher math knowledge/pedagogy questions for spring 2026 FGs with regional coordinators, district/LEA staff, math coaches, FS/LS principals, and FS/LS K–5 teachers Discuss teacher math knowledge/pedagogy questions during spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches

[3] Shaded text indicates completed activities.

Year 4 Timing	Math Coach Evaluation and Student Math Achievement	MTSS and Student Math Achievement	Teacher Math Knowledge/Pedagogy and Student Math Achievement
Apr – June 2026	Work with ALSDE/OMI to receive SY2025–26 school math coach and individual math coach performance data[4]	Complete MTSS interviews with select school leaders Analyze MTSS interview data and share preliminary findings; prepare narrative description of findings Analyze tiered intervention data; prepare description of findings (narrative and tables) Discuss MTSS questions during spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers	Discuss teacher math knowledge/pedagogy questions during spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers
July – Sept 2026	Receive and clean SY2025–26 math coach data	Analyze MTSS Year 4 annual survey data; prepare description of findings (narrative and tables) Work with OMI/ALSDE to receive school-level SY2025–26 data on tiered interventions from PowerSchool (data pending) Coordinate with OMI and regional coordinators to determine availability of SY2025–26 Depth of Implementation (DOI) school-level scores	Analyze teacher math knowledge/pedagogy Year 4 annual survey data; prepare description of findings (narrative and tables)

[4] Informed by OMI in May 2026 that SY2025–26 coach proficiency data would not be collected during the review meetings due to development of/transitioning to a new coach proficiency rubric. The coach evaluation study will be limited to available coach implementation metrics due to lack of SY2025–26 coach proficiency data.

Year 4 Timing	Math Coach Evaluation and Student Math Achievement	MTSS and Student Math Achievement	Teacher Math Knowledge/Pedagogy and Student Math Achievement
Oct – Dec 2026	Work with OMI/ALSDE to receive SY2025–26 math coach info for all schools (assignments, number of assigned math coaches per school, school's math coach funding source, math coach level of training/tier assigned, math coaches' other relevant professional learning and characteristics, coach implementation metrics[5]) Finalize SY2025–26 math coach study analysis plan based on available coach implementation metrics and coach characteristics as proxy for coach performance data Clean and prepare SY2025–26 math coach data and conduct analyses Prepare description of math coach study findings for Year 4 annual report (narrative and tables)	Merge school-level tiered intervention data from PowerSchool and school-level MTSS implementation data from annual survey with SY2025–26 student achievement data and analyze; prepare findings (narrative and tables) Triangulate and prepare description of MTSS findings across annual survey, tiered intervention, interviews, FGs, and student achievement data for Year 4 annual report (narrative and tables)	Administer SY2026–27 Mathematics for Teaching Tool (MTT) Merge and analyze SY2026–27 MTT data with previous years and SY2025–26 student achievement data; prepare description of findings (narrative and tables) Triangulate teacher math knowledge/pedagogy findings across Year 4 annual survey and MTT; prepare description of findings for Year 4 annual report (narrative and tables)

[5] The extent to which coach characteristics and implementation metrics are used to examine the relationship between various coaching factors and student achievement in all schools versus FS and LS schools will depend on the availability of such data.

Year 4 Timing	Effectiveness of Screening Assessments	Unintended Consequences of the ANA	Stakeholder Awareness and Satisfaction
Jan – Mar 2026	Prepare screening assessment section of Year 3 annual report Draft and finalize screening/diagnostic assessment questions for Year 4 annual survey Draft and finalize screening/diagnostic assessment questions for spring 2026 FGs with regional coordinators, district staff, FS/LS principals, math coaches, and FS/LS K–5 teachers Discuss screening/diagnostic assessment questions during spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches	Prepare unintended consequences of the ANA section of Year 3 annual report Draft and finalize unintended consequences questions for Year 4 annual survey Draft and finalize unintended consequences questions for spring 2026 FGs with parents, regional coordinators, district/LEA staff, math coaches, FS/LS principals, and FS/LS K–5 teachers Discuss unintended consequences questions during spring 2026 in-person FGs with parents Discuss unintended consequences questions during spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches	Prepare stakeholder awareness and satisfaction section of Year 3 annual report Draft and finalize stakeholder awareness and satisfaction questions for Year 4 annual survey Draft and finalize stakeholder awareness and satisfaction questions for spring 2026 FGs with parents, regional coordinators, district/LEA staff, math coaches, FS/LS principals, and FS/LS K–5 teachers Discuss stakeholder awareness and satisfaction questions during spring 2026 in-person FGs with parents Discuss stakeholder awareness and satisfaction questions during spring 2026 virtual FGs with regional coordinators, district/LEA staff, and math coaches
Apr – June 2026	Clean and analyze screening/diagnostic assessment Year 4 annual survey data Discuss screening/diagnostic assessment questions during spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers Analyze spring 2026 virtual FG data separately by regional coordinators, district/LEA staff, and math coaches; prepare findings (narrative and tables)	Clean and analyze unintended consequences Year 4 annual survey data Discuss unintended consequences questions during spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers Analyze spring 2026 parent in-person FG data; prepare findings (narrative and tables)	Clean and analyze stakeholder awareness and satisfaction Year 4 annual survey data Discuss stakeholder awareness and satisfaction questions during spring 2026 virtual FGs with FS/LS principals and FS/LS K–5 teachers Analyze spring 2026 parent in-person FG data; prepare findings (narrative and tables)

Year 4 Timing	Effectiveness of Screening Assessments	Unintended Consequences of the ANA	Stakeholder Awareness and Satisfaction
		Analyze spring 2026 virtual FG data separately by regional coordinators, district/LEA staff, and math coaches; prepare findings (narrative and tables)	Analyze spring 2026 virtual FG data separately by regional coordinators, district/LEA staff, and math coaches; prepare findings (narrative and tables)
July – Sept 2026	Analyze spring 2026 virtual FG data separately by FS/LS principals and FS/LS K–5 teachers; prepare findings (narrative and tables) Work with OMI/ALSDE to receive SY2025–26 student (a) screening/diagnostic assessment data and (b) tiered services/ math-related diagnosis classifications	Analyze spring 2026 virtual FG data separately by FS/LS principals and FS/LS K–5 teachers; prepare findings (narrative and tables)	Analyze spring 2026 virtual FG data separately by FS/LS principals and FS/LS K–5 teachers; prepare findings (narrative and tables)
Oct – Dec 2026	Clean and analyze SY2025–26 student screening/ diagnostic assessment and tiered services/ diagnosis data Triangulate Year 4 annual survey, spring 2026 virtual FG screening/ diagnostic assessment, and SY2025–26 screening/diagnostic assessment and tiered services/diagnosis data, as appropriate Prepare screening/diagnostic assessment section of Year 4 annual report (narrative and tables)	Triangulate Year 4 annual survey and spring 2026 FG unintended consequences data, as appropriate Prepare unintended consequences section of Year 4 annual report	Triangulate Year 4 annual survey and spring 2026 FG stakeholder awareness and satisfaction data, as appropriate Prepare stakeholder awareness and satisfaction section of Year 4 annual report

Year 4 Timing	Comparison	Cost Effectiveness Analysis
Jan – Mar 2026	Prepare comparison study section of Year 3 annual report	Prepare ANA cost effectiveness section of the Year 3 annual report Draft and finalize ANA cost questions for Year 4 annual survey Work with OMI/ALSDE to collect and verify SY2024–25 and SY2025–26 public/non-public ANA cost data
Apr – June 2026	Work with OMI/ALSDE to receive SY2025–26 school math coach and individual math coach performance data[6]	Clean and analyze cost ANA cost Year 4 annual survey data Continue to work with OMI/ALSDE to collect and verify SY2024–25 and SY2025–26 public/non-public ANA cost data
July – Sept 2026	Receive and clean SY2025–26 math coach school assignment data	Obtain ANA cost data from public sources; verify accuracy with OMI/ALSDE Merge and analyze ANA SY2025–26 cost data and cost data from Year 4 annual survey
Oct – Dec 2026	Conduct preliminary analysis of SY2025–26 school math coach and individual math coach data; if sufficient comparison schools, develop plans for retrospective quasi-experimental design (QED) study Finalize SY2025–26 comparison study impact analysis plan Conduct SY2025–26 impact analysis Prepare comparison study section of Year 4 annual report (narrative and tables)	Obtain final SY2025–26 costs data from OMI/ALSDE Triangulate Year 4 annual survey and public/non-public ANA cost findings Prepare description of ANA cost findings for Year 4 annual report (narrative and tables/figures)

[6] Informed by OMI in May 2026 that SY2025–26 coach proficiency data would not be collected during the review meetings due to development of/transitioning to a new coach proficiency rubric. The comparison study will be limited to available coach implementation metrics due to lack of SY2025–26 coach proficiency data.