



Proof of Concept

State Board of Education
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READY



Internal Descriptive Analyses

- Two Groups
- Group 1: Participated in all Proof of Concept Interim Assessments and Modified End-of-Grade
- Group 2: Participated in the Modified End-of-Grade Assessment for sampled subject



Proof of Concept (POC)—Group 1

- Stratified random sample based on region, ethnicity, gender, economically disadvantaged, and mean scale score (school-level variable)
- Students participated in all (3) POC interim assessments and the modified EOG assessment (summative)



Modified EOG Only—Group 2

- Stratified random sample based on region, ethnicity, gender, economically disadvantaged, and mean scale score (school-level variable)
- These students did not take the POC interim assessments but may have participated in local benchmark assessments
- Students who took the modified EOG assessment (summative) for one subject (grade 5 math or grade 6 ELA)



Descriptive Summary

Proof of Concept Grade 5 Math

2015–16



Math Grade 5 Samples

Math Grade 5	Number of Schools Sampled	Number of Students Sampled
Proof of Concept Math Group 1	45	3,906
Math Modified EOG Only Group 2	45	4,034



Table 1: Math Participation in Through Grade Assessments (treatment)

Math Grade 5	Number of Schools Sampled	Participated in Benchmark/Interim Assessments (treatment)*
Proof of Concept (POC) Math Group 1	45	POC Interims 1, 2, 3
Math Modified EOG Only Group 2	45	SchoolNet, i-Ready, Measure of Academic Progress (MAP), Discovery Ed Assessments, Scholastic Math Inventory Assessment (SMI), TE21 (Case), etc.

*The benchmark assessments listed for the Modified EOG Group 2 are based on an internet search of district and charter school web pages.



Table 2: Math Descriptive Statistics and Summative Scores by Group

Grade 5 Math Group	Summative Scale Score Data ¹					Demographic Data						
	Mean	Standard Deviation	25th %tile	Median	75th %tile	Percent Black	Percent Hispanic	Percent Other	Percent White	Percent EDS ²	Percent Female	Percent SWD ²
POC Group 1	451.2	10.2	444	452	459	23.7	16.8	6.8	52.7	46.1%	50.0%	11.3%
EOG Modified Only Group 2	450.9	10.2	444	451	458	26.4	18.3	7.0	48.3	49.8%	50.0%	11.4%

¹Students in Group 1 and Group 2 were administered the grade 5 modified math end-of-grade assessment at the end of the year. The math modified assessment does not include 10 field test items.

²Percent EDS denotes the percent of the sample represented by students identified as economically disadvantaged.

³Percent SWD denotes the percent of the sample represented by students identified as students with disabilities.



Table 5: Summative Math Achievement Level Distribution by Sample

Grade 5 Math Group	Number of Scores	Percent of Scores by Achievement Level					Percent of Scores with Achievement Level 3 and Higher
		1	2	3	4	5	
POC Math Group 1	3,906	17.67	20.97	5.99	32.51	22.86	61.4%
Math EOG Modified Only Group 2	4,034	18.44	20.90	6.54	32.77	21.34	60.7%



Table 3: Descriptive Statistics of Interim and Summative Scores—POC Math Group 1

Grade 5 Math	Number of Scores	Mean Score	Standard Deviation	Minimum	Maximum
POC Interim 1	3,906	15.02	5.32	0	25
POC Interim 2	3,906	13.99	6.35	0	25
POC Interim 3	3,906	12.88	6.17	0	25
Modified EOG (summative)*	3,906	451.25	10.17	426	474

*The grade 5 math modified end-of-grade assessment was administered as the summative assessment. Field test items were removed from the modified assessment.



Figure 1: POC Math Group 1 Score Distributions

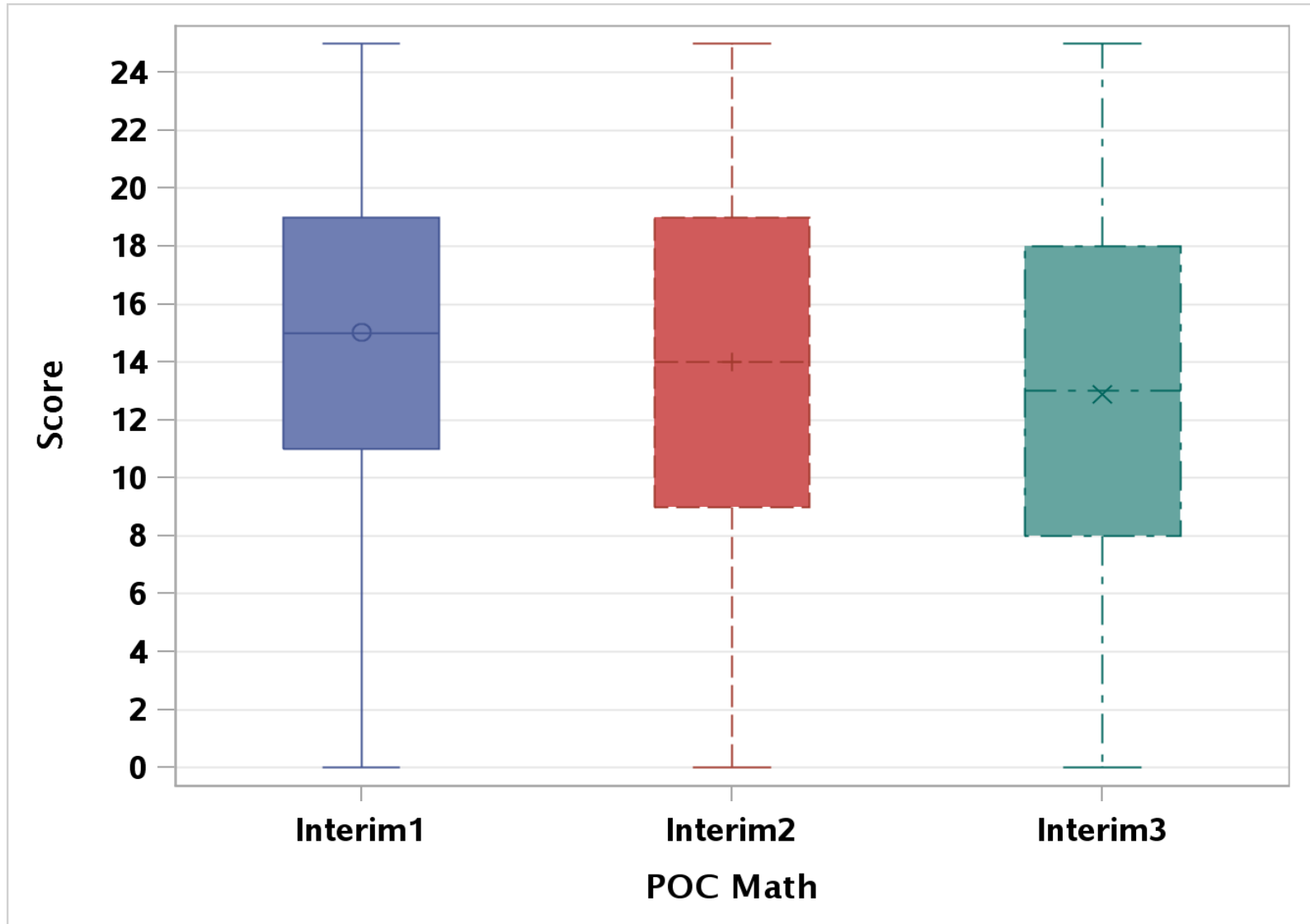




Table 4: Math Pearson Correlation of Scores—POC Math Group 1

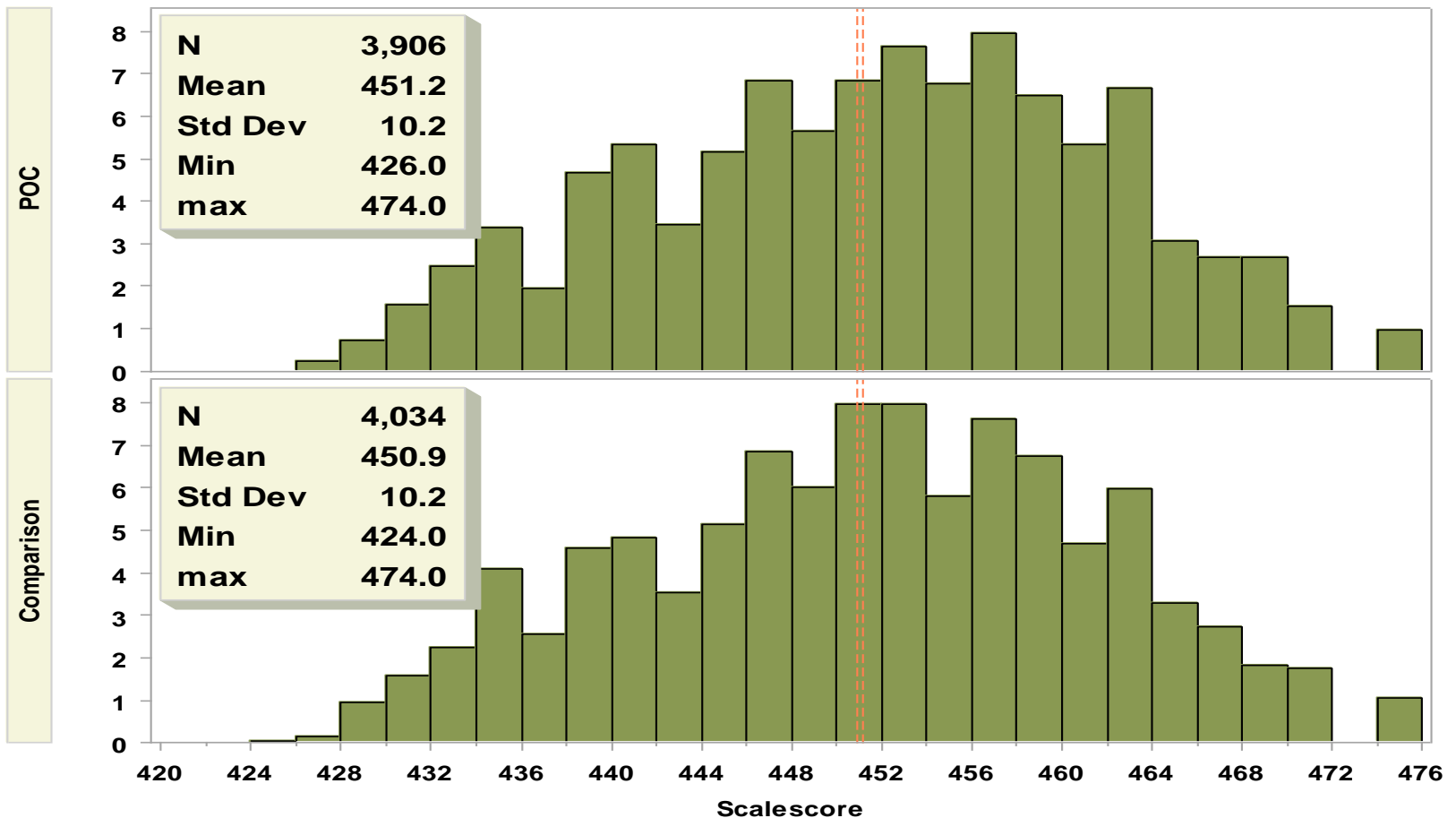
Grade 5 Math	POC Interim 1	POC Interim 2	POC Interim 3	EOG Modified Score (summative)*
POC Interim 1	1			
POC Interim 2	0.77	1		
POC Interim 3	0.76	0.84	1	
EOG Modified Score (summative)*	0.78	0.85	0.85	1

*The modified end-of-grade assessment does not include the field test items.



Figure 2: Grade 5 Math Scale Score Distribution by Sample

Scale Score Comparison For POC and Comparison Sample



Note: The **POC** label identified the POC Math Group 1 and the **Comparison** label identifies the Math EOG Modified Only Group 2.



Descriptive Summary
Proof of Concept Grade 6
English Language Arts/Reading
2015–16



English Language Arts/Reading Grade 6 Samples

ELA/Reading Grade 6	Number of Schools Sampled	Number of Students Sampled
Proof of Concept ELA Group 1	33	3,920
ELA Modified EOG Group 2	35	4,778



Table 1: ELA Participation in Through Grade Assessments (treatment)

ELA/Reading Grade 6	Number of Schools Sampled	Participated in Benchmark/Interim Assessments (treatment)*
Proof of Concept (POC) ELA Group 1	33	POC Interims 1, 2, 3
ELA Modified EOG Only Group 2	35	SchoolNet, i-Ready, Measure of Academic Progress (MAP), Discovery Ed Assessments, TE21 (Case), etc.

*The benchmark assessments listed for the Modified EOG Group 2 are based on an internet search of district and charter school web pages.



Table 2: ELA Descriptive Statistics and Summative Scores by Group

Grade 6 ELA Group	Summative Scale Score Data ¹					Demographic Data						
	Mean	Standard Deviation	25th %tile	Median	75th %tile	Percent Black	Percent Hispanic	Percent Other	Percent White	Percent EDS ²	Percent Female	Percent SWD ²
POC Group 1	452.5	11.1	445	453	461	21.0	15.9	9.8	53.3	51.7%	49.4%	12.4%
EOG Modified Only Group 2	451.8	11.5	444	453	460	26.1	15.0	7.1	51.8	51.0%	47.8%	14.1%

¹Students in Group 1 and Group 2 were administered the grade 6 modified ELA end-of-grade assessment at the end of the year. The modified ELA assessment does not include 8 field test items.

²Percent EDS denotes the percent of the sample represented by students identified as economically disadvantaged.

³Percent SWD denotes the percent of the sample represented by students identified as students with disabilities.



Table 5: Summative ELA/Reading Achievement Level Distribution by Sample

Grade 6 ELA/ Reading Group	Number of Scores	Percent of Scores by Achievement Level					Percent of Scores with Achievement Level 3 and Higher
		1	2	3	4	5	
POC ELA Group 1	3,920	17.63	24.03	8.72	35.28	14.34	58.3%
EOG Modified Only Group 2	4,778	20.59	22.60	9.31	33.15	14.34	56.8%



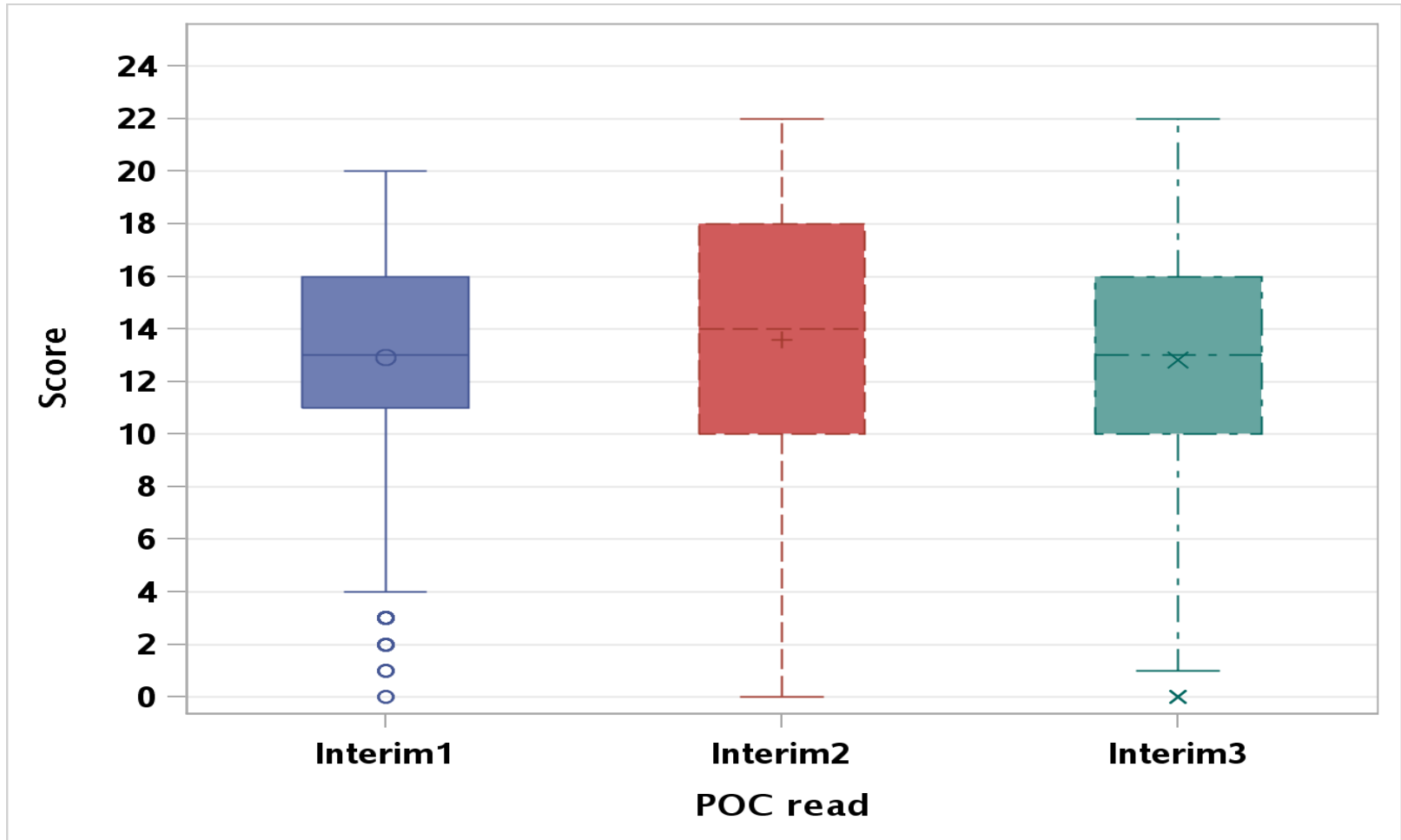
Table 3: Descriptive Statistics of Interim and Summative Scores—POC ELA Group 1

Grade 6 ELA/Reading	Number of Scores	Mean Score	Standard Deviation	Minimum	Maximum
POC Interim 1	3,920	12.95	3.65	0	20
POC Interim 2	3,920	13.63	4.97	0	22
POC Interim 3	3,920	12.88	4.32	0	22
Modified EOG (summative)*	3,920	452.48	11.09	422	478

*The grade 6 ELA/reading modified end-of-grade assessment was administered as the summative assessment. Field test items were removed from the modified assessment.



Figure 1: POC ELA Group 1 Score Distributions



Note: *POC read* is POC ELA Group 1.



Table 4: ELA/Reading Pearson Correlation of Scores—POC ELA Group 1

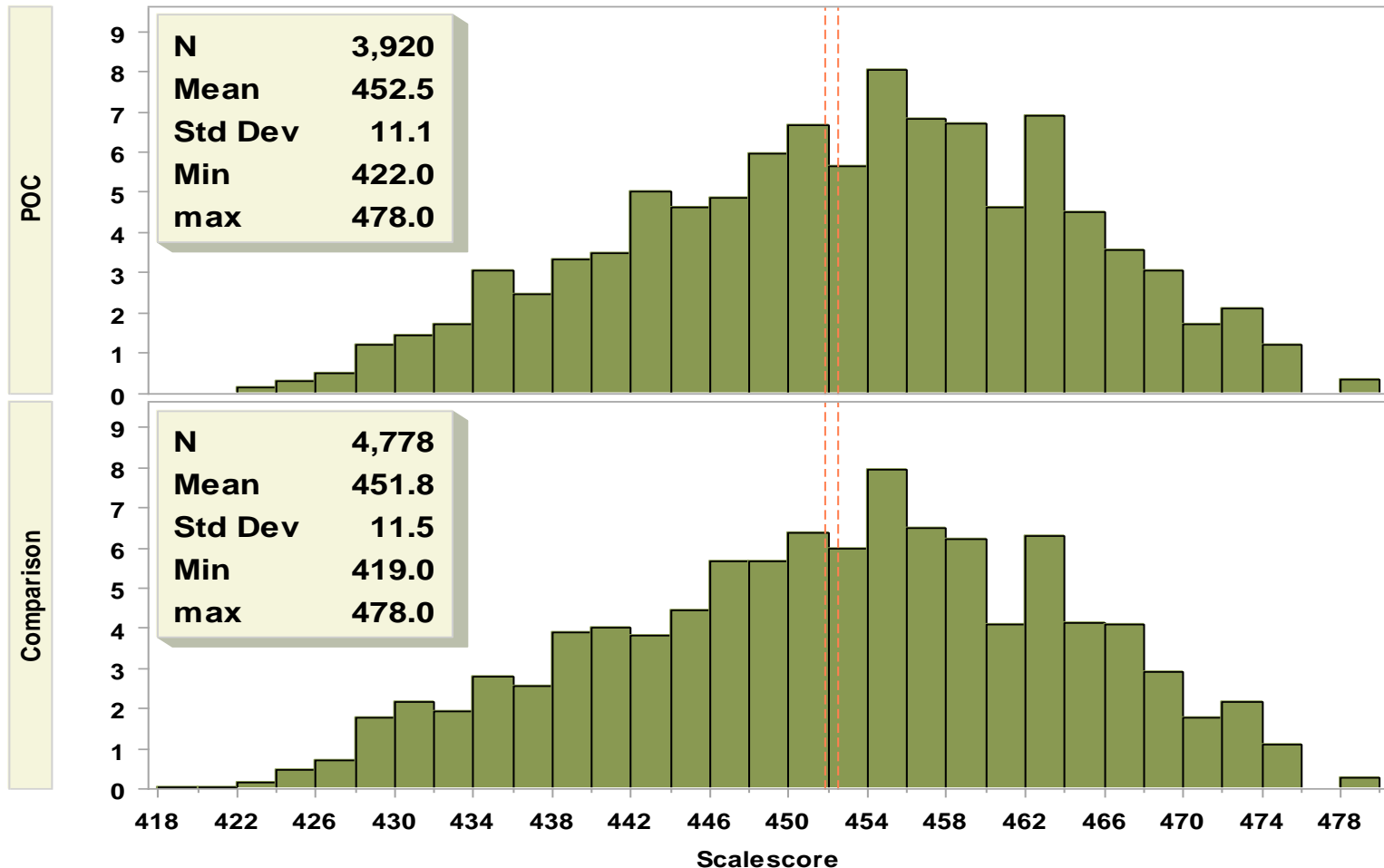
Grade 6 ELA/Reading	POC Interim 1	POC Interim 2	POC Interim 3	EOG Modified Score (summative)*
POC Interim 1	1			
POC Interim 2	0.735	1		
POC Interim 3	0.691	0.731	1	
EOG Modified Score (summative)*	0.761	0.791	0.767	1

*The modified end-of-grade assessment does not include the field test items.



Figure 2: Grade 6 ELA/Reading Scale Score Distribution by Sample

Scale Score Comparison For POC and Comparison Sample



Note: The **POC** label identified the POC ELA Group 1 and the **Comparison** label identifies the ELA EOG Modified Only Group 2.



Recommendation for 2016–17

- Continue with current purpose and grade level/content
 - Grade 5 Mathematics
 - Grade 6 ELA/Reading
- Increase number of participating schools
 - From 5% of schools at each grade/content to approximately 15%
 - Consider including a subset of low-performing schools
 - Allow volunteers to participate: prefer at least one school per LEA
- Administer the summative assessment
 - Students take the entire end-of-grade assessment



Recommendation for Expansion

School Year	Mathematics Grades	ELA/Reading Grades
2016–17	Grade 5	Grade 6
2017–18*	Some grades	Some grades
2018–19	All grades 3–8	All grades 3–8

*Collaborate with the NCDPI/K–12 Curriculum and Instruction Division and gather input from the field to determine which grade levels to include in 2017–18.



External Evaluation Report

- Dr. James Bartlett, NC State University