

OFFICE OF CHIEF ACCOUNTABILITY OFFICER
Summary of State Board of Education Agenda Items
August 19, 2021

OFFICE OF STUDENT ASSESSMENT

06. Action: Approval of the recommended cut scores on the Mississippi Academic Assessment Program - Alternate (MAAP-A) for science assessments in Grades 5, 8, and Alternate Biology [Goals 1 and 2 – MBE Strategic Plan]

Background Information: The 2018 Mississippi Alternate Academic Achievement Standards (MAAAS) for Science were implemented in school year 2019-2020. The MAAP-A science assessments for Grades 5, 8, and Alternate Biology have been revised to align with the 2018 MAAAS for Science. To evaluate the new assessment, cut scores are established which: (a) reflect the MAAAS for the science courses, (b) link students' scores on the tests to expectations for students in each performance level, and (c) are well articulated across tests.

From June 29 to July 1, 2021, a standard setting was conducted by Questar Assessments, the MDE, and ACS Ventures, LLC. For this process, 12 Mississippi educators served as panelists and were tasked with making recommendations of cut scores associated with policy-driven, threshold performance level descriptors (PLDs) that distinguish among the three performance levels: basic, pass, and proficient. The standard setting approach applied the Extended Angoff method where panelist looked at each assessment task and made judgements about expected student performance. The panelists completed two (2) rounds of independent review and subsequent group discussions to recommend the cut scores to correspond to the performance levels. Two psychometricians from the Center for Assessment reviewed the results for the Mississippi Department of Education.

The final recommendation is to use the committee decisions for the 2020-2021 alternate science scoring process but to use only the pass or did not pass for the student score reports. Due to potential impacts of COVID-19 on instruction and assessment, the MDE, Questar, and the TAC will conduct a performance standard review and validation process following the 2021-2022 academic year for the alternate science assessments in Grades 5, 8, and Alternate Biology.

This item references Goals 1 and 2 of the *Mississippi Board of Education 2018 – 2022 Strategic Plan*.

Recommendation: Approval

Back-up material attached



Standard Setting for the Mississippi Alternate Assessment for Science

July 26, 2021

Background

The 2018 Mississippi Alternate Academic Achievement Standards (MAAAS) for Science were implemented during the 2019–2020 school year. The Mississippi Alternate Achievement Program – Alternate (MAAP-A) science assessments for Grades 5, 8, and Alternate Biology were revised to align with the 2018 MAAAS for Science. The first administration of this new assessment in the 2020-2021 school year.

The MDE contracted with Questar Assessments, Inc. (Questar), which subcontracted with ACS Ventures (ACS) to design and implement a standard setting workshop meeting with Mississippi educator panelists to recommend initial cut scores that would define the threshold performance levels for achievement on the MAAP-A Science assessments. On June 29, 30, and July 1, 2021, a standard setting was conducted by Questar, ACS, and the MDE. The standard setting approach applied the Extended Angoff method where panelist looked at each assessment task and made judgements about expected student performance. The panelists completed two (2) rounds of independent review and subsequent group discussions to recommend the cut scores to correspond to the performance levels.

Feedback and Recommendations

At the conclusion of the workshop, the cut score recommendations for each assessment were provided to MDE for their review. Based upon the evidence collected and the review of the performance of panelists, the workshop resulted in recommendations for the cut scores supported by subject matter experts. The recommendation is to use the cut scores for spring 2021 as an interim scale and reevaluate the student performance again in June 2022 after more representative data has been collected from students during the spring 2022 operational administration. This recommendation is consistent with advice from the MDE’s national technical advisory committee (TAC).

The TAC has reviewed all documents and tables and confirmed that the MDE, Questar, and ACS developed an appropriate plan for establishing the cut scores.

Furthermore, the TAC acknowledges that the 2020–2021 academic year was quite atypical. The impact of COVID–19 disrupted many facets of education including assessment. Among other factors, these disruptions may have influenced a student’s opportunity to learn, administration conditions, or motivation. Collectively, these factors create a substantial challenge for establishing stable performance standards, which is an issue the TAC identified in early discussions. For this reason, ***the TAC recommends that the MDE conduct a performance standard review and validation process following the 2021–2022***

academic year. This will position MDE to better evaluate the impact of performance expectations longer term and either adjust or affirm the preliminary recommendations produced this year.

Final Recommendation

For the 12 tasks on the tests, a transformed scale of 0-24 was used to rate the cut scores. Pending the validation process after the spring 2022 administration, the scores will be reported on the 200-400 current scale scores.

Table 1 displays the final score recommendations for the grade 5, grade 8, and biology assessments. The table uses the median panelists ratings to recommend cut scores for students in the Passing and Proficient performance levels.

Table 1. Final Cut Score Recommendations - Science

Test	Rounded Scores	
	Passing	Proficient
Grade 5	13	17
Grade 8	14	17
Biology	14	19

Please Note: Only Pass-Did Not Pass labels will be used for Student Score Reports for spring 2021 science assessments.