



Multilingual Learner Supports

Science

Grades K-12

About EdReports

Our Mission: EdReports.org is an independent nonprofit designed to improve K-12 education. EdReports.org increases the capacity of teachers, administrators, and leaders to seek, identify, and demand the highest quality instructional materials. Drawing upon expert educators, our reviews of instructional materials and support of smart adoption processes equip teachers with excellent materials nationwide.

Our Vision: All students and teachers will have access to the highest quality instructional materials that will help improve student learning outcomes.

Our Theory of Action: If we identify excellence and increase demand for excellence, then we increase the number of students in classrooms with high-quality instructional materials.

About Our Review Tools

EdReports reviewers use these review tools to create free, evidence-rich reports available on EdReports.org. These reports are developed to provide educators, stakeholders, and leaders with independent, evidence-rich information about the quality of instructional materials from those who will be using them in classrooms. Expert educators use our tools to evaluate full sets of instructional materials against criteria (see Figure 1). The tools are built from the experience of educators, curriculum experts, and leading rubric developers and organizations that have conducted reviews of instructional materials, lessons, and tasks.

To create our review tools, EdReports utilizes information from the Common Core State Standards (CCSS) and the Next Generation Science Standards (NGSS). We also conduct research into the application of commonly used rubrics, gather input from hundreds of educators during nationwide listening tours, interview content experts, and convene Anchor Educator Working Groups of expert practitioners. Continuous improvement is important to this development, and each tool is used with multiple sets of materials before being finalized. In addition, the Anchor Educator Working Group has the opportunity to refine the tools after the initial round of implementation.

About MLL Review Criteria

The Multilingual Learner (MLL) tools are designed to be separate from and integrated with the content tools, utilizing research-based aspects of success for MLLs to highlight where and how MLL students can be successful within the materials. There are four categories of MLL criteria: MLLs' Full and Complete Participation in Grade-Level Content, Coherence of MLL Supports, Teacher Guidance, and Assessment (see Figure 1). The criteria remain the same across content areas and grade-levels, but are integrated into Gateways 1 & 2 in ways that reflect the priorities and structures of each content tool.

Scoring is present for MLL indicators and points roll-up into MLL criterion scores, but there is not an overall MLL gateway or summary score. MLL scoring is not integrated with and does not impact content scoring, i.e., materials will proceed through the gateway system regardless of MLL scores.

All comprehensive Math, Science, and ELA materials reviewed by EdReports for content will also be reviewed on the MLL tool starting in Q1 2025

Figure 1: MLL Criteria for Review of Science Materials (Grades K-12)

Criterion 1: MLLs’ Full and Complete Participation in Grade-Level Content

Do the materials include necessary components of curriculum to allow MLLs to fully participate in grade-level content? These indicators are integrated into content-area tools in key places crucial to content.

Criterion 2: Coherence of MLL Supports

Are MLL supports intentionally developed over time and do they reflect the interdependence of language and content?

Criterion 3: Teacher Guidance

Do materials provide guidance for all teachers to effectively implement the provided strategies and supports for MLLs?

Criterion 4: Assessment

Do materials provide guidance for teachers on how MLLs can demonstrate their knowledge and understanding of grade-level content, regardless of language ability, as well as providing guidance on formatively assessing for language alongside content?

Criterion 1

MLLs’ Full and Complete Participation in Grade-Level Content

To identify the Criterion rating, educators use evidence gathered to score indicators related to each indicator.

Criterion 1 MLL indicators are connected to the content indicators focusing on Phenomena and Problems and the Three Dimensions (SEPs, DCIs, and CCCs) in each tool. Indicator names reflect the content indicator they are connected to using this naming convention: *(Content Indicator).MLL*. Some content indicators have more than one associated MLL indicator; in these cases, a number will follow the indicator name. For example, 1a.MLL-1 and 1a.MLL-2 focus on phenomena and problems separately. Each indicator in this criterion relies on the same research-based measures of quality for MLLs’ simultaneous development of content and language, which are detailed in the Evidence Guide. To ensure that MLLs can fully and completely participate in all aspects of the content crucial to high-quality instructional materials, each indicator in this criterion has been constructed in the following manner: “Materials provide support for MLLs’ full and complete participation in (connected content indicator language).”

Criterion 1: Materials include necessary components of curriculum to allow MLLs to fully participate in grade-level content, integrated into content-area tools in key places crucial to content.

Indicators + Scoring Criteria	Scoring
1a.MLL-1 Materials provide support for MLLs’ full and complete participation in grade-level learning of phenomena as included in the materials. <ul style="list-style-type: none"> Materials consistently provide strategies and supports for MLLs to fully and completely participate in grade-level learning of phenomena as included in the materials. 	0 1 2
1a.MLL-2 Materials provide support for MLLs’ full and complete participation in grade-level learning of problems as included in the materials. <ul style="list-style-type: none"> Materials consistently provide strategies and supports for MLLs to fully and completely participate in grade-level learning of problems as included in the materials. 	0 1 2
1g.MLL-1 Materials provide support for MLLs’ full and complete participation in sensemaking of the Science and Engineering Practices. <ul style="list-style-type: none"> Materials consistently provide strategies and supports for MLLs to fully and completely participate in sensemaking of Science and Engineering practices. 	0 1 2
1g.MLL-2 Materials provide support for MLLs’ full and complete participation in sensemaking of Disciplinary Core Ideas. <ul style="list-style-type: none"> Materials consistently provide strategies and supports for MLLs to fully and completely participate in sensemaking of Disciplinary Core Ideas. 	0 1 2
1g.MLL-3 Materials provide support for MLLs’ full and complete participation in sensemaking of Cross Cutting Concepts. <ul style="list-style-type: none"> Materials consistently provide strategies and supports for MLLs to fully and completely participate in sensemaking of Cross Cutting Concepts. 	0 1 2

Materials must meet the expectations of all scoring criteria in order to receive full points for the indicator.

NOTE: While MLL indicators are embedded into content to illustrate where within the content multilingual learners are and are not supported, the scores are reported separately as part of MLL criteria.

Total Available Points	10	Meets: 8-10 Partially Meets: 5-7 Does Not Meet: < 5
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Criterion 2

Coherence of MLL Supports

To identify the Criterion rating, educators use evidence gathered to score indicators related to each indicator.

Criterion 2 MLL indicators are connected to the content Criterion 2.1 focusing on coherence and scope in each tool. Indicator names reflect the content criteria they are connected to using this naming convention: *(Content Criterion).MLL*. Some content criteria have more than one associated MLL indicator; in these cases, a number will follow the indicator name.

Criterion 2: MLL supports are intentionally developed over time and reflect the interdependence of language and content.

Indicators + Scoring Criteria	Scoring
2.1.MLL-1 Materials intentionally develop language in ways valued by disciplinary practices over time, across lessons, units, and throughout the course. <ul style="list-style-type: none"> Materials show evidence of the intentional development of language in ways valued by disciplinary practices over time, through lessons, units, and throughout the course. 	0 1 2
2.1.MLL-2 Materials include a scope & sequence that develops different language learning goals over time (activities, lessons, units, courses), similar to the progression of content and practice learning objectives, to build toward student independence. <ul style="list-style-type: none"> Materials include a scope & sequence that develops different language learning goals over time (activities, lessons, units, courses), similar to the progression of content and practice learning objectives, to build toward student independence. 	0 1
2.1.MLL-3 Materials include language goals/objectives that are incorporated at the individual lesson level. <ul style="list-style-type: none"> Materials include language goals/objectives incorporated at the lesson level that are clear, measurable, and tied directly to the content objectives. Materials include language goals/objectives incorporated at the lesson level that are written according to what designers want students to do with language (language functions), and/or the language structures and vocabulary that are used to support those functions (language forms). Materials include language goals/objectives incorporated at the lesson level that are clearly focused on at least one of the four domains of language: speaking, listening, reading, and writing. 	0 2 3 4

Materials must meet the expectations of all scoring criteria in order to receive full points for the indicator.

NOTE: While MLL indicators are embedded into content to illustrate where within the content multilingual learners are and are not supported, the scores are reported separately as part of MLL criteria.

Total Available Points	7	Meets: 5-7 Partially Meets: 3-4 Does Not Meet: < 3
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Criterion 3

Teacher Guidance

To identify the Criterion rating, educators use evidence gathered to score indicators related to each indicator.

Criterion 3 MLL indicators are connected to the content Gateway 3 focusing on teacher and student supports in each tool. Indicator names reflect the content criteria they are connected to using this naming convention: *(Content Criterion).MLL*. Some content criteria have more than one associated MLL indicator; in these cases, a number will follow the indicator name. In Criterion 3, there are also MLL indicators that parallel a specific content indicator within the connected criterion. These indicator names reflect the content indicator they are connected to using this naming convention: *(Content Indicator).MLL*. For example, 3e.MLL mirrors 3e in the Science tools.

Criterion 3: Materials provide guidance for all teachers to effectively implement the provided strategies and supports for MLLs.

Indicators + Scoring Criteria	Scoring
<p>3e.MLL Materials provide explanations of the instructional approaches of the program for MLLs and identification of the research-based strategies.</p> <ul style="list-style-type: none"> Materials explain the instructional approaches of the program for MLLs. Materials include and reference research-based strategies for the MLL approach. 	0 1 2
<p>3.1.MLL-1 Materials provide teacher guidance to support MLL students and to utilize the strategies, supports, and/or accommodations found.</p> <ul style="list-style-type: none"> Materials provide comprehensive guidance that will assist teachers in supporting MLL students and to utilize the strategies, supports, and/or accommodations found. Materials include sufficient and useful annotations and suggestions that are presented within the context of the lessons where the strategies, supports, and/or accommodations are to be used. 	0 1 2
<p>3.1.MLL-2 Materials include guidance for teachers to engage students in drawing attention to the use and development of language functions within disciplinary practices, allowing students to link language to concepts.</p> <ul style="list-style-type: none"> Materials include guidance for teachers to engage students in drawing attention to the use and development of language functions within disciplinary practices, allowing students to link language to concepts. 	0 1
<p>3.1.MLL-3 Materials guide teachers on how to match students with language supports, progressing along a continuum, and to be responsive to students' current language development in relation to the content.</p> <ul style="list-style-type: none"> Materials guide teachers on how to match students with language supports, progressing along a continuum. Materials guide teachers on how to be responsive to students' current language development in relation to the content. 	0 1 2
<p>3.1.MLL-4 Materials provide guidance for teachers around using suggested scaffolds and supports with different program models for MLLs.</p> <ul style="list-style-type: none"> Materials include guidance for teachers around using suggested scaffolds and supports with different program models for MLLs. 	0 1
<p>3m.MLL Materials include guidance for intentional and flexible grouping structures for MLLs to ensure equitable participation.</p> <ul style="list-style-type: none"> Materials include guidance for intentional and flexible grouping structures for MLLs. Materials include guidance to ensure equitable participation for MLLs in group work. 	0 1 2
<p>3.2.MLL-1 Materials provide guidance to encourage teachers to draw upon student home language to facilitate learning.</p> <ul style="list-style-type: none"> Materials consistently provide guidance to encourage teachers to draw upon student home language to facilitate learning. 	0 1 2
<p>3.2.MLL-2 Materials provide scaffolds and supports in an equitable way.</p> <ul style="list-style-type: none"> Materials provide scaffolds and supports in an equitable way. 	0 1

Materials must meet the expectations of all scoring criteria in order to receive full points for the indicator.

NOTE: While MLL indicators are embedded into content to illustrate where within the content multilingual learners are and are not supported, the scores are reported separately as part of MLL criteria.

Total Available Points	13	Meets: 7-13 Partially Meets: 4-6 Does Not Meet: < 4
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Criterion 4

Assessment

To identify the Criterion rating, educators use evidence gathered to score indicators related to each indicator.

Criterion 4 MLL indicators are connected to the content Criteria 1.2 and 3.2 focusing on assessments in each tool. Indicator names reflect the content criteria they are connected to using this naming convention: *(Content Criterion).MLL*. Some content criteria have more than one associated MLL indicator; in these cases, a number will follow the indicator name. In Criterion 4, there are also MLL indicators that parallel a specific content indicator within the connected criterion. These indicator names reflect the content indicator they are connected to using this naming convention: *(Content Indicator).MLL*. For example, 3n.MLL mirrors 3n in the Science tools.

Criterion 4: Materials provide guidance for teachers on how MLLs can demonstrate their knowledge and understanding of grade-level content, regardless of language ability, as well as providing guidance on formatively assessing for language alongside content.

Indicators + Scoring Criteria	Scoring
3n.MLL Assessments offer accommodations that allow MLLs to demonstrate their knowledge and skills without changing the content of the assessment. <ul style="list-style-type: none"> Assessments offer accommodations that allow MLLs to demonstrate their knowledge and skills without changing the content of the assessment. 	0 1
1.2.MLL-1 Materials include a formative assessment plan for language alongside content that includes a connection to established unit/lesson language goals. <ul style="list-style-type: none"> Materials include a formative assessment plan for language alongside content that consistently includes a connection to established unit/lesson language goals. 	0 1 2
1.2.MLL-2 Materials include guidance for gathering, analyzing, using, and communicating language and content data from formative assessments in a cycle of continuous improvement. <ul style="list-style-type: none"> Materials consistently include guidance for gathering, analyzing, using, and communicating language and content data from formative assessments in a cycle of continuous improvement. 	0 1 2

Materials must meet the expectations of all scoring criteria in order to receive full points for the indicator.

NOTE: While MLL indicators are embedded into content to illustrate where within the content multilingual learners are and are not supported, the scores are reported separately as part of MLL criteria.

Total Available Points	5	Meets: 4-5 Partially Meets: 2-3 Does Not Meet: < 2
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