Original Posting Date: 11/2/2018



Instructional Materials Evaluation Tool for Alignment in Science Grades K – 12 (IMET)



Strong science instruction requires that students:

- Apply content knowledge to explain real world phenomena and to design solutions,
- Investigate, evaluate, and reason scientifically, and
- Connect ideas across disciplines.

Title: <u>Studies Weekly Science</u> Grade/Course: <u>4-6</u>

Publisher: <u>Studies Weekly</u> Copyright: <u>2017</u>

Overall Rating: <u>Tier III, Not representing quality</u>
<u>Tier I, Tier III, Tier III</u> Elements of this review:

STRONG	WEAK
	1. Three-dimensional Learning (Non-Negotiable)
	2. Phenomenon-Based Instruction (Non-Negotiable)

Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

Tier 1 ratings received a "Yes" for all Criteria 1-8.

Tier 2 ratings received a "Yes" for all non-negotiable criteria, but at least one "No" for the remaining criteria.

Tier 3 ratings received a "No" for at least one of the non-negotiable criteria.

Click below for complete grade-level reviews:

Grade 4 (Tier 3) Grade 5 (Tier 3) Grade 6 (Tier 3)



Instructional Materials Evaluation Tool for Alignment in Science Grades K – 12 (IMET)



Strong science instruction requires that students:

Apply content knowledge to explain real world phenomena and to design solutions,

Investigate, evaluate, and reason scientifically, and

• Connect ideas across disciplines.

Title: <u>Studies Weekly Science</u> Grade/Course: <u>4</u>
Publisher: <u>Studies Weekly</u> Copyright: <u>2017</u>

Overall Rating: <u>Tier III, Not representing quality</u>
<u>Tier I, Tier III, Tier III</u> Elements of this review:

STRONG	WEAK
	1. Three-dimensional Learning (Non-Negotiable)
	2. Phenomenon-Based Instruction (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicator in Column 2, then the materials receive a "No" in Column 1. Submissions must meet Criteria 1 and 2 for the review to continue to Criteria 3 and 4. Submissions must meet all of the non-negotiable criteria in order for the review to continue to Section II.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 8.

Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria, but at least one "No" in Column 1 for the remaining criteria.

Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	TERIA: Submissions must meet Criteria 1 and 2 for the revrie in order for the review to continue to Section II.	view to continue	to Criteria 3 and 4. Submissions must
Non-Negotiable 1. THREE-DIMENSIONAL LEARNING: Students have multiple opportunities throughout each unit to develop an understanding and demonstrate application of the three dimensions. Yes No	REQUIRED 1a) Materials are designed so that students develop scientific content knowledge and scientific skills through interacting with the three dimensions of the science standards. The majority of the materials teach the science and engineering practices, crosscutting concepts and disciplinary core ideas separately when necessary but they are most often integrated to support deeper learning.	No	Materials are not designed for students to develop scientific content knowledge and skills through interactions with the three dimensions of the science standards. The Science and Engineering Practices (SEP), Crosscutting Concepts (CCC), and Disciplinary Core Ideas (DCI) are not explicitly called out within the materials. No evidence was found to support that the majority of the materials teach the three dimensions explicitly when necessary, or in an integrated manner. Although some articles within the materials involve students in hands-on science activities, students do not engage with the SEP as called for by the standards. For example, the "Mystery Matter" article (Week 3) provides students with step-by-step directions to follow in order to create a mystery substance and observe its properties. This experiment does not support learners in "Planning and Conducting an Investigation" as intended by the SEP. According to the instructional materials, Weeks 1-9 focus on Physical Science. However, the DCI are not explicitly called out and evidence of content that connects to them could not be found in the student materials. In addition, the CCC are not explicitly addressed. The lessons for Weeks 10-18 are not three-dimensional in nature. While some earth and space science content is included in these lessons, the DCI are not explicitly identified, and evidence that connects to them could not be found in the student materials. Similarly, the CCC are not addressed.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Non-Negotiable 2. PHENOMENON-BASED INSTRUCTION: Explaining phenomenon and designing solutions drive student learning. Yes NO	REQUIRED 2a) Observing and explaining phenomena and designing solutions provide the purpose and opportunity for students to engage in learning a majority of the time.		
			anchoring experience. Because of this, the purpose and opportunity for learning in subsequent investigations and activities is not phenomenon-based. At an investigative level, within each issue, a phenomenon-based approach is not evident. The following articles are specific examples that illustrate this overall trend: "What's that You're e-Reading?," "Magnetic Power" issue (Week 7), which provides a multi-paragraph description of e-readers as well as some basic information on what makes them work and "And Now for the Slimy, Crawly Stuff," Earth's Animals issue (Week 24), which displays a photograph of a frog and provides students with some interesting numbers to illustrate

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			relative amounts of different species present on earth." While both articles grab the reader's attention, they do not connect back to a central, anchoring phenomenon or elicit the introduction and curiosity necessary to drive and focus the student learning sequence.
Non-Negotiable (only reviewed if criteria 1 and 2 are met) 3. ALIGNMENT & ACCURACY:	REQUIRED 3a) The majority of the Louisiana Student Standards for Science are incorporated, to the full depth of the standards.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Materials adequately address the Louisiana Student Standards for Science.	REQUIRED 3b) Science content is accurate , reflecting the most current and widely accepted explanations.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Yes No	3c) In any one grade or course, instructional materials spend minimal time on content outside of the course, grade, or grade-band.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Non-Negotiable (only reviewed if criteria 1 and 2 are met) 4. DISCIPLINARY LITERACY: Materials have students engage with authentic sources and incorporate speaking, reading, and writing to develop scientific	REQUIRED *Indicator for grades 4-12 only 4a) Students regularly engage with authentic sources that represent the language and style that is used and produced by scientists; e.g., journal excerpts, authentic data, photographs, sections of lab reports, and media releases of current science research. Frequency of engagement with authentic sources should increase in higher grade levels and courses.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
literacy. Yes No	REQUIRED 4b) Students regularly engage in speaking and writing about scientific phenomena and engineering solutions using authentic science sources; e.g., authentic data, models, lab investigations, or journal excerpts. Materials address the necessity of using scientific evidence to support scientific ideas.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	REQUIRED 4c) There is variability in the tasks that students are required to execute. For example, students are asked to produce solutions to problems, models of phenomena, explanations of theory development, and conclusions from investigations.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	4d) Materials provide a coherent sequence of authentic science sources that build scientific vocabulary and knowledge over the course of study. Vocabulary is addressed as needed in the materials but not taught in isolation of deeper scientific learning.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
SECTION II: ADDITIONAL INDICAT	ORS OF QUALITY		
Additional Criterion 5. LEARNING PROGRESSIONS: The materials adequately address Appendix A: Learning Progressions. They are coherent and provide natural connections to other performance expectations including science and engineering	REQUIRED 5a) The overall organization of the materials and the development of disciplinary core ideas, science and engineering practices, and crosscutting concepts are coherent within and across units. The progression of learning is coordinated over time, clear and organized to prevent student misunderstanding and supports student mastery of the performance expectations.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
practices, crosscutting concepts, and disciplinary core ideas; the content complements the the Louisiana Student Standards for Math. Yes No	5b) Students apply mathematical thinking when applicable. They are not introduced to math skills that are beyond the applicable grade's expectations in the Louisiana Student Standards for Mathematics. Preferably, math connections are made explicit through clear references to the math standards, specifically in teacher materials.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA INDICATORS OF SUPERIOR QUALITY		MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Additional Criterion	REQUIRED	Not Evaluated	This section was not evaluated because the non-
6. SCAFFOLDING AND SUPPORT:	6a) There are separate teacher support materials		negotiable criteria were not met.
Materials provide teachers with	including: scientific background knowledge, support in		
guidance to build their own	three-dimensional learning, learning progressions,		
knowledge and to give all students	common student misconceptions and suggestions to		
extensive opportunities and	address them, guidance targeting speaking and writing		
support to explore key concepts	in the science classroom (i.e. conversation guides,		
using multiple, varied experiences	sample scripts, rubrics, exemplar student responses).		
to build scientific thinking.	6b) Appropriate suggestions and materials are provided	Not Evaluated	This section was not evaluated because the non-
	for differentiated instruction supporting varying student		negotiable criteria were not met.
Yes No	needs at the unit and lesson level (e.g., alternative		
	teaching approaches, pacing, instructional delivery		
	options, suggestions for addressing common student		
	difficulties to meet standards, etc.).		
Additional Criterion	REQUIRED	Not Evaluated	This section was not evaluated because the non-
7. USABILITY:	7a) Text sets (when applicable), laboratory, and other		negotiable criteria were not met.
Materials are easily accessible,	scientific materials are readily accessible through		
promote safety in the science	vendor packaging.		
classroom, and are viable for	7b) Materials help students build an understanding of	Not Evaluated	This section was not evaluated because the non-
implementation given the length of	standard operating procedures in a science laboratory		negotiable criteria were not met.
a school year.	and include safety guidelines, procedures, and		
	equipment. Science classroom and laboratory safety		
Yes No	guidelines are embedded in the curriculum.		
	7c) The total amount of content is viable for a school	Not Evaluated	This section was not evaluated because the non-
	year.		negotiable criteria were not met.
Additional Criterion	REQUIRED	Not Evaluated	This section was not evaluated because the non-
8. ASSESSMENT:	8a) Multiple types of formative and summative		negotiable criteria were not met.
Materials offer assessment	assessments (performance-based tasks, questions,		
opportunities that genuinely	research, investigations, and projects) are embedded		
measure progress and elicit direct,	into content materials and assess the learning targets.		
observable evidence of the degree			
to which students can	REQUIRED	Not Evaluated	This section was not evaluated because the non-
independently demonstrate the	8b) Assessment items and tasks are structured on		negotiable criteria were not met.
assessed standards.	integration of the three-dimensions .		
	8c) Scoring guidelines and rubrics align to performance	Not Evaluated	This section was not evaluated because the non-

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Yes No	expectations, and incorporate criteria that are specific, observable, and measurable.		negotiable criteria were not met.

FINAL EVALUATION

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 - 8.

Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria, but at least one "No" in Column 1 for the remaining criteria.

Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
It Non Nogotishles	1. Three-dimensional Learning	No	Materials are not designed for students to develop scientific content knowledge and skills through interactions with the three dimensions of the science standards. The SEP, CCC, and DCI are not explicitly called out within the materials. No evidence was found to support that the majority of the materials teach the three dimensions explicitly when necessary, or, most often, in an integrated manner.
I: Non-Negotiables	2. Phenomenon-Based Instruction	No	Observing and explaining phenomena that allow students to design solutions through active inquiry is not explicitly addressed. In addition, no evidence of phenomenon-based instruction could be found.
	3. Alignment & Accuracy	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	4. Disciplinary Literacy	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	5. Learning Progressions	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
II: Additional Indicators of Quality	6. Scaffolding and Support	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7. Usability	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	8. Assessment	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.

FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality



Instructional Materials Evaluation Tool for Alignment in Science Grades K – 12 (IMET)



Strong science instruction requires that students:

Apply content knowledge to explain real world phenomena and to design solutions,

Investigate, evaluate, and reason scientifically, and

• Connect ideas across disciplines.

Title: <u>Studies Weekly Science</u> Grade/Course: <u>5</u>
Publisher: <u>Studies Weekly</u> Copyright: <u>2017</u>

Overall Rating: <u>Tier III, Not representing quality</u>
<u>Tier I, Tier III, Tier III</u> Elements of this review:

STRONG	WEAK
	1. Three-dimensional Learning (Non-Negotiable)
	2. Phenomenon-Based Instruction (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicator in Column 2, then the materials receive a "No" in Column 1. Submissions must meet Criteria 1 and 2 for the review to continue to Criteria 3 and 4. Submissions must meet all of the non-negotiable criteria in order for the review to continue to Section II.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 - 8.

Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria, but at least one "No" in Column 1 for the remaining criteria.

Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	TERIA: Submissions must meet Criteria 1 and 2 for the revria in order for the review to continue to Section II.	riew to continue	to Criteria 3 and 4. Submissions must
Non-Negotiable 1. THREE-DIMENSIONAL LEARNING: Students have multiple opportunities throughout each unit to develop an understanding and demonstrate application of the three dimensions. Yes No	REQUIRED 1a) Materials are designed so that students develop scientific content knowledge and scientific skills through interacting with the three dimensions of the science standards. The majority of the materials teach the science and engineering practices, crosscutting concepts and disciplinary core ideas separately when necessary but they are most often integrated to support deeper learning.	No	Materials are not designed for students to develop scientific content knowledge and skills through interacting with the three dimensions of the science standards. The Science and Engineering Practices (SEP), Crosscutting Concepts (CCC), and Disciplinary Core Ideas (DCI) are not explicitly called out within the materials. No evidence was found to support that the majority of the materials teach the three dimensions explicitly when necessary, or in an integrated manner. Although some articles within the materials involve students in hands-on science activities, students do not engage with the SEP as called for by the standards. For example, within the physical science issues, Weeks 1-9, there is no clear way in which the DCI are connected to CCC and SEP. The "Solids/Liquids/Gases" article from the Week 3 Issue asks students to crush ice and contain it in a water bottle in order to make observations about cold air compared to hot air. There is no explicitly stated Science and Engineering Practice identified for the materials. This experiment does not support learners in "Planning and Conducting an Investigation" as intended by the SEP. In the earth and space issues, there is no clear way in which the DCI are connected to CCC and SEP. For example, in the "Let's Investigate" article (Week 11), students are asked to create an investigation. However, students are not supported in engaging with the SEP as called for by the standards, and within this article there was no evidence found of integration with the other dimensions. In addition, the life science issues for weeks 19-28 are not three- dimensional in nature. Although the "Systems of Life" issue (Week 26) and "Being

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Human" issue (Week 27) use the word systems, no evidence of CCC connected or integrated with other components of three-dimensional learning could be found.
Non-Negotiable 2. PHENOMENON-BASED INSTRUCTION: Explaining phenomenon and designing solutions drive student learning. Yes No	REQUIRED 2a) Observing and explaining phenomena and designing solutions provide the purpose and opportunity for students to engage in learning a majority of the time.	No	Explaining phenomenon and designing solutions does not drive student learning in the materials. While each weekly issue opens with an initial hook that introduces students to the topics to be explored within the articles that follow, this introductory material does not serve as a complex anchoring phenomenon that challenges students to build explanations through further investigation or establish direction for designing solutions to drive the purpose for learning. For example, the Week 2 "All About Matter" issue opens with an article by the same name. This article introduces students to the word "matter" and tells how "everything is made of matter," different states of matter exist and can change, and tiny particles called atoms make up all matter. Like the other introductory articles across the majority of weekly issues, students are told about the key ideas they'll be learning about rather than invited to figure out through a complex, anchoring experience. Because of this, the purpose and opportunity for learning in subsequent investigations and activities is not phenomenon-based. At an investigative level, within each issue, a phenomenon-based approach is not evident. The following articles are specific examples that illustrate this overall trend: "Transfiguration: 'Harry Potter' Series by J. K. Rowling," "All About Matter" issue (Week 2), which uses examples from the popular books, such as when characters transform a matchstick into a needle, to relate and contrast with the idea of changes in matter and "Floating Stop Signs in Technology Past and Present" issue (Week 8), which asks about gas mileage and discusses the future possibility of floating cars. While both articles

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			grab the reader's attention, they do not connect back to a central, anchoring phenomenon or elicit the curiosity necessary to drive and focus the student learning sequence.
Non-Negotiable (only reviewed if criteria 1 and 2 are met) 3. ALIGNMENT & ACCURACY:	REQUIRED 3a) The majority of the Louisiana Student Standards for Science are incorporated, to the full depth of the standards.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Materials adequately address the Louisiana Student Standards for Science.	REQUIRED 3b) Science content is accurate , reflecting the most current and widely accepted explanations.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Yes No	3c) In any one grade or course, instructional materials spend minimal time on content outside of the course, grade, or grade-band.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Non-Negotiable (only reviewed if criteria 1 and 2 are met) 4. DISCIPLINARY LITERACY: Materials have students engage with authentic sources and incorporate speaking, reading, and writing to develop scientific	REQUIRED *Indicator for grades 4-12 only 4a) Students regularly engage with authentic sources that represent the language and style that is used and produced by scientists; e.g., journal excerpts, authentic data, photographs, sections of lab reports, and media releases of current science research. Frequency of engagement with authentic sources should increase in higher grade levels and courses.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
literacy. Yes No	REQUIRED 4b) Students regularly engage in speaking and writing about scientific phenomena and engineering solutions using authentic science sources; e.g., authentic data, models, lab investigations, or journal excerpts. Materials address the necessity of using scientific evidence to support scientific ideas.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	REQUIRED 4c) There is variability in the tasks that students are required to execute. For example, students are asked to produce solutions to problems, models of phenomena, explanations of theory development, and conclusions from investigations.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	4d) Materials provide a coherent sequence of authentic science sources that build scientific vocabulary and knowledge over the course of study. Vocabulary is addressed as needed in the materials but not taught in isolation of deeper scientific learning.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
SECTION II: ADDITIONAL INDICAT	ORS OF QUALITY		
Additional Criterion 5. LEARNING PROGRESSIONS: The materials adequately address Appendix A: Learning Progressions. They are coherent and provide natural connections to other performance expectations including science and engineering	REQUIRED 5a) The overall organization of the materials and the development of disciplinary core ideas, science and engineering practices, and crosscutting concepts are coherent within and across units. The progression of learning is coordinated over time, clear and organized to prevent student misunderstanding and supports student mastery of the performance expectations.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
practices, crosscutting concepts, and disciplinary core ideas; the content complements the the Louisiana Student Standards for Math. Yes No	5b) Students apply mathematical thinking when applicable. They are not introduced to math skills that are beyond the applicable grade's expectations in the Louisiana Student Standards for Mathematics. Preferably, math connections are made explicit through clear references to the math standards, specifically in teacher materials.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Additional Criterion	REQUIRED	Not Evaluated	This section was not evaluated because the non-
6. SCAFFOLDING AND SUPPORT:	6a) There are separate teacher support materials		negotiable criteria were not met.
Materials provide teachers with	including: scientific background knowledge, support in		
guidance to build their own	three-dimensional learning, learning progressions,		
knowledge and to give all students	common student misconceptions and suggestions to		
extensive opportunities and	address them, guidance targeting speaking and writing		
support to explore key concepts	in the science classroom (i.e. conversation guides,		
using multiple, varied experiences	sample scripts, rubrics, exemplar student responses).		
to build scientific thinking.	6b) Appropriate suggestions and materials are provided	Not Evaluated	This section was not evaluated because the non-
	for differentiated instruction supporting varying student		negotiable criteria were not met.
Yes No	needs at the unit and lesson level (e.g., alternative		
	teaching approaches, pacing, instructional delivery		
	options, suggestions for addressing common student		
	difficulties to meet standards, etc.).		
Additional Criterion	REQUIRED	Not Evaluated	This section was not evaluated because the non-
7. USABILITY:	7a) Text sets (when applicable), laboratory, and other		negotiable criteria were not met.
Materials are easily accessible,	scientific materials are readily accessible through		
promote safety in the science	vendor packaging.		
classroom, and are viable for	7b) Materials help students build an understanding of	Not Evaluated	This section was not evaluated because the non-
implementation given the length of	standard operating procedures in a science laboratory		negotiable criteria were not met.
a school year.	and include safety guidelines, procedures, and		
	equipment. Science classroom and laboratory safety		
Yes No	guidelines are embedded in the curriculum.		
	7c) The total amount of content is viable for a school	Not Evaluated	This section was not evaluated because the non-
	year.		negotiable criteria were not met.
Additional Criterion	REQUIRED	Not Evaluated	This section was not evaluated because the non-
8. ASSESSMENT:	8a) Multiple types of formative and summative		negotiable criteria were not met.
Materials offer assessment	assessments (performance-based tasks, questions,		
opportunities that genuinely	research, investigations, and projects) are embedded		
measure progress and elicit direct,	into content materials and assess the learning targets.		
observable evidence of the degree	REQUIRED	Not Evaluated	This section was not evaluated because the non-
to which students can	8b) Assessment items and tasks are structured on		negotiable criteria were not met.
independently demonstrate the	integration of the three-dimensions.		
assessed standards.	8c) Scoring guidelines and rubrics align to performance	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Yes No	expectations, and incorporate criteria that are specific, observable, and measurable.		
FINAL EVALUATION			

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 - 8.

Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria, but at least one "No" in Column 1 for the remaining criteria.

Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
Is Non Negatiobles	1. Three-dimensional Learning	No	Materials are not designed for students to develop scientific content knowledge and skills through interactions with the three dimensions of the science standards. The SEP, CCC, and DCl are not explicitly called out within the materials. No evidence was found to support that the majority of the materials teach the three dimensions explicitly when necessary, or, most often, in an integrated manner.
I: Non-Negotiables	2. Phenomenon-Based Instruction	No	Observing and explaining phenomena that allow students to design solutions through active inquiry is not explicitly addressed. In addition, no evidence of phenomenon-based instruction could be found.
	3. Alignment & Accuracy	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	4. Disciplinary Literacy	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	5. Learning Progressions	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
II: Additional Indicators of Quality	6. Scaffolding and Support	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	7. Usability	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	8. Assessment	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.

FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality



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Strong science instruction requires that students:

Apply content knowledge to explain real world phenomena and to design solutions,

Investigate, evaluate, and reason scientifically, and

• Connect ideas across disciplines.

Title: <u>Studies Weekly Science</u> Grade/Course: <u>6</u>
Publisher: <u>Studies Weekly</u> Copyright: <u>2017</u>

Overall Rating: <u>Tier III, Not representing quality</u>
<u>Tier I, Tier III, Tier III</u> Elements of this review:

STRONG	WEAK
	1. Three-dimensional Learning (Non-Negotiable)
	2. Phenomenon-Based Instruction (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicator in Column 2, then the materials receive a "No" in Column 1. Submissions must meet Criteria 1 and 2 for the review to continue to Criteria 3 and 4. Submissions must meet all of the non-negotiable criteria in order for the review to continue to Section II.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a "Yes" for all required indicators in Column 2, then the materials receive a "Yes" in Column 1. If there is a "No" for any required indicators in Column 2, then the materials receive a "No" in Column 1.

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 - 8.

Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria, but at least one "No" in Column 1 for the remaining criteria.

Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	TERIA: Submissions must meet Criteria 1 and 2 for the revia in order for the review to continue to Section II.	riew to continue	to Criteria 3 and 4. Submissions must
Non-Negotiable 1. THREE-DIMENSIONAL LEARNING: Students have multiple opportunities throughout each unit to develop an understanding and demonstrate application of the three dimensions. Yes No	REQUIRED 1a) Materials are designed so that students develop scientific content knowledge and scientific skills through interacting with the three dimensions of the science standards. The majority of the materials teach the science and engineering practices, crosscutting concepts and disciplinary core ideas separately when necessary but they are most often integrated to support deeper learning.	No	Materials are not designed for students to develop scientific content knowledge and skills through interacting with the three dimensions of the science standards. The Science and Engineering Practices (SEP), Crosscutting Concepts (CCC), and Disciplinary Core Ideas (DCI) are not explicitly called out within the materials. No evidence was found to support that the majority of the materials teach the three dimensions explicitly when necessary, or in an integrated manner. In Weeks 1-10 of the physical science issues, students do participate in hands-on activities in some instances, but there is no clear way in which the SEP are connected to the other dimensions. For example, the "Reaction Rates" article, "Changing Matter" issue (Week 3), asks students to complete three separate investigations to determine the effects that concentration, surface area, and temperature have on reaction rates. These experiments do not support learners in engaging with SEPs at the level called for by the standards. In Weeks 11-20, the earth and space science issues, the majority of the lessons are not three-dimensional in nature. CCC are not explicitly taught in isolation or integrated with other dimensions. Although students do engage in science activities at certain times, evidence of three-dimensional learning could not be found. For example, in Week 12, students do engage with "Developing and Using Models" (SEP) to answer questions about physical weathering. However, the SEP are not explicitly called out or addressed to the depth called for by the standards, and this activity is completed in isolation.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			In the life science issues (Weeks 21-28), some components related to CCC are included, but the CCCs are neither explicitly identified nor are they integrated with DCIs and SEPs. For example, in the "Cells, Tissues, Organs" issue (Week 22), there is mention of structures and functions of cells, but this occurs in isolation within an individual article, "Cells: The Body's Building Blocks." The majority of materials in this unit do not connect CCC across lessons or integrate them with the other components of three-dimensional learning. In other instances, further evidence could be found in which students engage in science activities, but students do not necessarily interact with the SEP as called for by the standards. This is evidenced in the article "Let's Investigate," "Ecology" issue (Week 28), in which students are asked to imagine that a storm uprooted a tree in a yard. A prompt invites students to predict the changes that would result. This activity does not adequately address the SEPs in isolation or in an integrated manner.
Non-Negotiable 2. PHENOMENON-BASED INSTRUCTION: Explaining phenomenon and designing solutions drive student learning. Yes No	REQUIRED 2a) Observing and explaining phenomena and designing solutions provide the purpose and opportunity for students to engage in learning a majority of the time.	No	Explaining phenomenon and designing solutions does not drive student learning in the materials. While each weekly issue opens with an initial hook that introduces students to the topics to be explored within the articles that follow, this introductory material does not serve as a complex anchoring phenomenon that challenges students to build explanations through further investigation or establish direction for designing solutions to drive the purpose for learning. For example, introductory materials in the article "Forces at Work in the Universe," "Force" issue (Week 4,) display an illustration of scientists playing baseball and introduce students to physics as a branch of science, telling learners that this week they will be learning "about the forces at work in our universe - in scenarios like a baseball game." However, students do not engage with the playing of baseball to drive their learning throughout the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			unit. Similarly, "Energy: Time for a Change in Energy Transformations," "Energy Transformation" issue (Week 7), asks questions such as "[How would you like] riding in a car powered by prehistoric creatures?" beneath an illustration of a dinosaur pulling a car to which it is harnessed. The article defines the terms "energy" and "transformations" for students, explaining that they will be learning even more about energy transformations throughout the week. Like the other introductory articles across the majority of weekly issues, students are told about the key ideas they'll be learning about rather than invited to figure out through a complex, anchoring experience. Because of this, the purpose and opportunity for learning in subsequent investigations and activities is not phenomenon-based. At an investigative level, within each issue, a phenomenon-based approach is not evident. The following articles are specific examples that illustrate this overall trend: "Forensic Art," "Forensics" issue (Week 24), provides readers with a brief overview of how forensic artists use age progression and "The Space Race," "Space Exploration" issue (Week 20), tells students about the launch of Sputnik and other events that led to the formation of NASA and later the first lunar landing. While both articles grab the reader's
			attention, they do not connect back to a central, anchoring phenomenon or elicit the curiosity necessary to drive and focus the student learning sequence.
Non-Negotiable (only reviewed if criteria 1 and 2 are met) 3. ALIGNMENT & ACCURACY:	REQUIRED 3a) The majority of the Louisiana Student Standards for Science are incorporated, to the full depth of the standards.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
Materials adequately address the Louisiana Student Standards for	REQUIRED 3b) Science content is accurate, reflecting the most	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Science.	current and widely accepted explanations.		
Yes No	3c) In any one grade or course, instructional materials spend minimal time on content outside of the course, grade, or grade-band.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Non-Negotiable (only reviewed if criteria 1 and 2 are met) 4. DISCIPLINARY LITERACY: Materials have students engage with authentic sources and incorporate speaking, reading, and writing to develop scientific	REQUIRED *Indicator for grades 4-12 only 4a) Students regularly engage with authentic sources that represent the language and style that is used and produced by scientists; e.g., journal excerpts, authentic data, photographs, sections of lab reports, and media releases of current science research. Frequency of engagement with authentic sources should increase in higher grade levels and courses.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
literacy. Yes No	REQUIRED 4b) Students regularly engage in speaking and writing about scientific phenomena and engineering solutions using authentic science sources; e.g., authentic data, models, lab investigations, or journal excerpts. Materials address the necessity of using scientific evidence to support scientific ideas.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	REQUIRED 4c) There is variability in the tasks that students are required to execute. For example, students are asked to produce solutions to problems, models of phenomena, explanations of theory development, and conclusions from investigations.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	4d) Materials provide a coherent sequence of authentic science sources that build scientific vocabulary and knowledge over the course of study. Vocabulary is addressed as needed in the materials but not taught in isolation of deeper scientific learning.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
SECTION II: ADDITIONAL INDICAT	ORS OF QUALITY		
Additional Criterion 5. LEARNING PROGRESSIONS: The materials adequately address Appendix A: Learning Progressions. They are coherent and provide natural connections to other	REQUIRED 5a) The overall organization of the materials and the development of disciplinary core ideas, science and engineering practices, and crosscutting concepts are coherent within and across units. The progression of learning is coordinated over time, clear and organized to	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
performance expectations including science and engineering practices, crosscutting concepts, and disciplinary core ideas; the content complements the the Louisiana Student Standards for Math. Yes No	prevent student misunderstanding and supports student mastery of the performance expectations. 5b) Students apply mathematical thinking when applicable. They are not introduced to math skills that are beyond the applicable grade's expectations in the Louisiana Student Standards for Mathematics. Preferably, math connections are made explicit through clear references to the math standards, specifically in teacher materials.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
Additional Criterion 6. SCAFFOLDING AND SUPPORT: Materials provide teachers with guidance to build their own knowledge and to give all students extensive opportunities and support to explore key concepts using multiple, varied experiences	REQUIRED 6a) There are separate teacher support materials including: scientific background knowledge, support in three-dimensional learning, learning progressions, common student misconceptions and suggestions to address them, guidance targeting speaking and writing in the science classroom (i.e. conversation guides, sample scripts, rubrics, exemplar student responses).	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
to build scientific thinking. Yes No	6b) Appropriate suggestions and materials are provided for differentiated instruction supporting varying student needs at the unit and lesson level (e.g., alternative teaching approaches, pacing, instructional delivery options, suggestions for addressing common student difficulties to meet standards, etc.).	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Additional Criterion 7. USABILITY: Materials are easily accessible, promote safety in the science	REQUIRED 7a) Text sets (when applicable), laboratory, and other scientific materials are readily accessible through vendor packaging.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
classroom, and are viable for implementation given the length of a school year.	7b) Materials help students build an understanding of standard operating procedures in a science laboratory and include safety guidelines, procedures, and equipment. Science classroom and laboratory safety guidelines are embedded in the curriculum.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
165 110	7c) The total amount of content is viable for a school year.	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
Additional Criterion 8. ASSESSMENT: Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree	REQUIRED 8a) Multiple types of formative and summative assessments (performance-based tasks, questions, research, investigations, and projects) are embedded into content materials and assess the learning targets.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
to which students can independently demonstrate the assessed standards.	REQUIRED 8b) Assessment items and tasks are structured on integration of the three-dimensions.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
Yes No	8c) Scoring guidelines and rubrics align to performance expectations, and incorporate criteria that are specific, observable, and measurable.	Not Evaluated	This section was not evaluated because the non- negotiable criteria were not met.
	mn 1 for Criteria 1 – 8. mn 1 for all non-negotiable criteria, but at least one "No" in mn 1 for at least one of the non-negotiable criteria.	Column 1 for th	e remaining criteria.
Compile the results for Sections I an	d II to make a final decision for the material under review.		
Section	Criteria	Yes/No	Final Justification/Comments
		No	Materials are not designed for students to develo scientific content knowledge and skills through

1. Three-dimensional Learning

I: Non-Negotiables

interactions with the three dimensions of the

science standards. The SEP, CCC, and DCI are not explicitly called out within the materials. No evidence was found to support that the majority of

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			the materials teach the three dimensions explicitly when necessary, or, most often, in an integrated manner.
	2. Phenomenon-Based Instruction	No	Observing and explaining phenomena that allow students to design solutions through active inquiry is not explicitly addressed. In addition, no evidence of phenomenon-based instruction could be found.
	3. Alignment & Accuracy	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	4. Disciplinary Literacy	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
II: Additional Indicators of Quality	5. Learning Progressions	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	6. Scaffolding and Support	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7. Usability	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	8. Assessment	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality			





Instructional materials are one of the most important tools educators use in the classroom to enhance student learning. It is critical that they fully align to state standards—what students are expected to learn and be able to do at the end of each grade level or course—and are high quality if they are to provide meaningful instructional support.

The Louisiana Department of Education is committed to ensuring that every student has access to high-quality instructional materials. In Louisiana all districts are able to purchase instructional materials that are best for their local communities since those closest to students are best positioned to decide which instructional materials are appropriate for their district and classrooms. To support local school districts in making their own local, high-quality decisions, the Louisiana Department of Education leads online reviews of instructional materials.

Instructional materials are reviewed by a committee of Louisiana educators. Teacher Leader Advisors (TLAs) are a group of exceptional educators from across Louisiana who play an influential role in raising expectations for students and supporting the success of teachers. Teacher Leader Advisors use their robust knowledge of teaching and learning to review instructional materials.

The 2018-2019 Teacher Leader Advisors are selected from across the state and represent the following parishes and school systems: Ascension, Bossier, Caddo, Desoto, East Baton Rouge, East Carroll, Einstein Charter Schools, Iberia, InspireNOLA, Jefferson, Lafayette, Lincoln, Livingston, Orleans, Ouachita, Plaquemines, Rapides, Recovery School District, RSD - Choice Foundation, RSD - FirstLine, RSD - NOCP, St. Charles, St. James, St. Mary, St. Tammany, Tangipahoa, Vermilion, West Baton Rouge, Zachary. This review represents the work of current classroom teachers with experience in grades 3-12.

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

Public Review - Louisiana Online Instructional Materials Reviews

Welcome! Thank you for sharing your views and participating in this review.

The following rules govern public comments related to the state review of instructional materials:

- 1. By submitting this review you agree to the rules that govern public comments.
- 2. Parents and other members of the public are encouraged to provide input relative to the textbooks and instructional materials under state review.
- 3. Responses and comments are subject to publication as part of the final state review.
- 4. The public comment period for any program under review is four weeks.
- 5. Comments submitted below must be related to the instructional materials you select.
- 6. In lieu of commenting through the official online form, attachments and separate e-mails may be submitted to LouisianaCurriculumReview@la.gov, but must include the title or reference number associated with instructional materials that are under state
- 7. Comments using profanity or deemed slanderous of any nature will not be published.

As a reminder, to access completed state reviews, a current list of instructional materials available for public review, and list of those coming soon, visit http://www.louisianabelieves.com/academics/ONLINE-INSTRUCTIONAL-MATERIALS- REVIEWS.

Titles currently available for review are included in the choices below.

Email questions to LouisianaCurriculumReview@la.gov.

First and Last Name

Patricia Guidry

In what Louisiana parish do you live? (If not a Louisiana resident, indicate the city and state of your residence.) Lafayette

Submit a Review

Disclaimer: I understand that the Department will not verify the accuracy or validity of public comments and that these comment do not reflect the opinions or policies of the State Board of Elementary and Secondary Education or the State Superintendent of Education.

Please respond to the following set of questions and leave comments below.

About which materials are you submitting a comment?

Studies Weekly - Studies Weekly Science, K-6 (Science Full Curriculum)

Were the materials inviting and appealing?

Yes

Were the materials user-friendly and easy to navigate?

Yes

Were the materials age and grade appropriate?

Yes

My comments pertain to:

The entire program

Comments:

Timestamp for Comment: 3/5/2018 00:16