

Science Resource

Review:

K-12

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March 13, 2017

Resource Review Process K- 8

- **January 12 – Committee Convened**
 - Overview of process
 - Established criteria and “must-haves” for adoption
- **January 23 – Publisher Presentations**
 - Short presentations with program overviews
 - Initial Review and Evaluation
- **January 30**
 - Close Review and Evaluation by “must haves”
 - Narrowed selection

Resource Review Process K - 8



- **February 1-24**
 - School Review and Evaluation

- **February 13**
 - Finalist presentations to address our district's needs and questions
 - Shared school feedback and recommendations

- **February 27**
 - Reached consensus

Our Recommendation



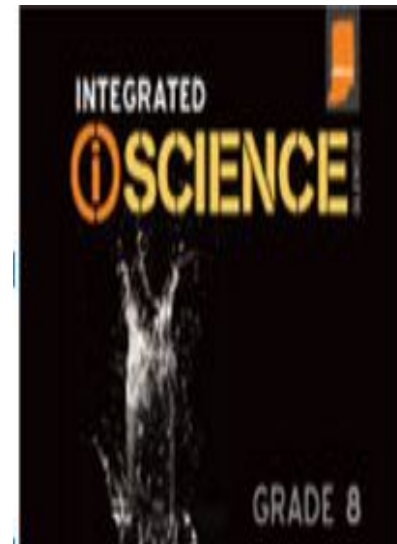
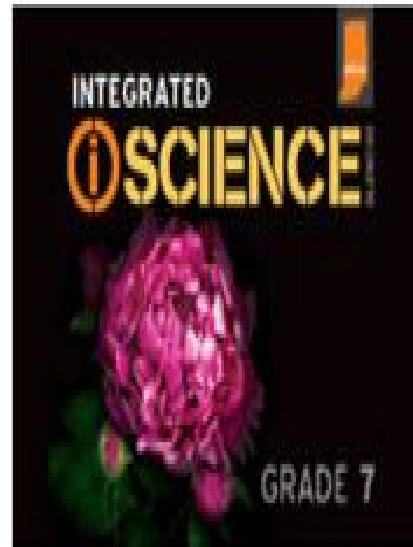
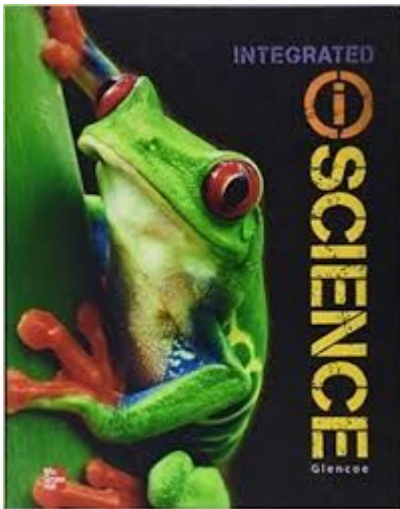
Grades K-5 - McGraw Hill *Inspire Science*

Program Features

- **Aligned and Accessible Content**
 - Alignment to science standards and units
 - Hands-on inquiry AND literacy-based resources
 - Instructional supports for differentiation
- **Flexibility for Instructional Delivery**
 - “Be a Scientist” notebook
 - Science Handbook
 - Leveled Readers
 - Digital Platform - videos, virtual labs, resources
- **Fiscally Responsible**
 - Manageable materials for teachers and students with more reasonable costs to district and student fees



Our Recommendation



Grades 6-8
McGraw Hill Education
Integrated Science

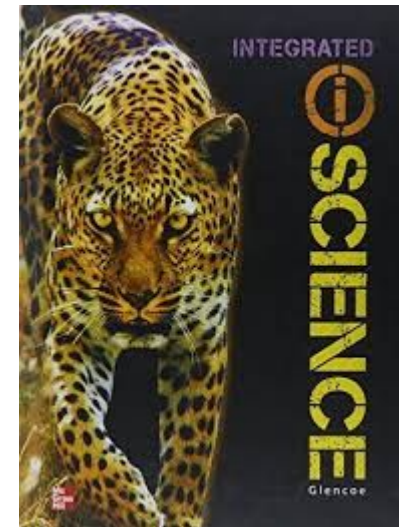
Program Features

- **Aligned and Accessible Content**

- alignment to science standards and Big Ideas of science
- excellent progression of skills and real-world connections
- strong digital features and ability to manipulate reading material
- strong lab support

- **Engaging and Student-Centered**

- authentic and relevant
- opportunities for differentiation
- alignment between 6th-7th grade to provide continuity



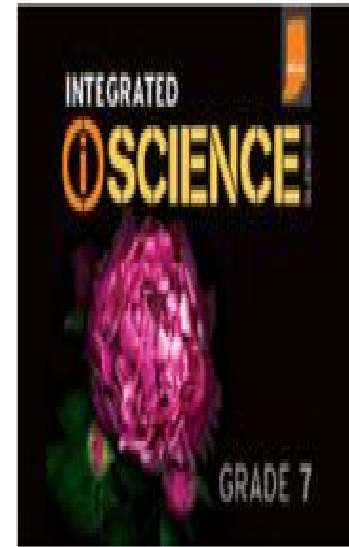
Program Features

- **Aligned and Accessible Content**

- alignment to science standards, Big Ideas, and essential questions
- connections to literacy and mathematics in every unit
- ability to manipulate reading material by
- strong lab support

- **Engaging and Student-Centered**

- provides opportunities for students to represent their ideas and to respond to peer and teacher feedback
- opportunities for differentiation
- Project Based Learning is connected to the content
- multiple forms of assessment



9-12 Science and Health

Science

Jan 17th Publisher Presentations

Jan 23rd - Feb 17th School Meetings to Review Samples

Feb 21st Rubric Scoring Review and Discussion

Health

Jan 26th Committee Leadership Meeting

Feb 17th Pearson Presentation

Feb 22nd McGraw Hill Presentation

Mar 1 Rubric Scoring Review and Discussion

9-12 Science and Health

Scoring Rubrics and Strength/Limitations

- Content
- Assessment
- Work Students Do
- Work Teachers Do

Science Content: Analyze Evidence

Directions:

1. Review the Science Content Rubric.
2. Record strengths and limitations for each criterion based on your observations. Cite specific evidence.
3. Reflect on the evidence (or lack of evidence) that you gathered and determine the score for each criterion. Record each score on the Score Sheet.

Publisher: _____ Course: _____ Title: _____

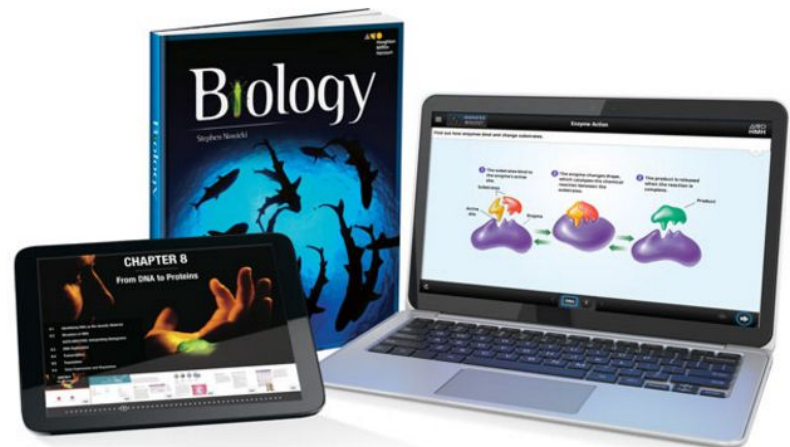
	Criteria	Strengths	Limitations
Content	Standards Alignment		
	Accuracy		
	Concept Development		
	Sequencing		
	Context		

SCIENCE CONTENT RUBRIC	(5)	(3)	(1)
STANDARDS ALIGNMENT Indiana science content standards: <ul style="list-style-type: none"> • Nature of Science Process Standards, • Design Process Standards, • Core Standards and Indicators. 	Most of the science process and content standards and indicators designated for the specific course and/or grade level are addressed.	Some of the science process and content standards and indicators designated for the specific course and/or grade level are addressed.	Few of the science process and content standards and indicators designated for the specific course and/or grade level are addressed.
ACCURACY Accurate science content: <ul style="list-style-type: none"> • Is grounded in current research and conforms to fact, • Includes explanations about science that translate information into developmentally appropriate content without losing original meaning or distorting fact. 	Most of the science content is accurate with few errors of fact or interpretation.	Some of the science content is accurate with few errors of fact or interpretation.	Little of the science content is accurate with few errors of fact or interpretation.
CONCEPT DEVELOPMENT Content developed for conceptual understanding: <ul style="list-style-type: none"> • Focuses on a limited number of key concepts, • Develops concepts in-depth at a developmentally appropriate level, • Requires students to apply and demonstrate their understanding in multiple ways. 	Most key science concepts are developed for conceptual understanding.	Some key science concepts are developed for conceptual understanding.	Few key science concepts are developed for conceptual understanding.
SEQUENCING Content with a coherent sequence: <ul style="list-style-type: none"> • Is organized in a deliberate fashion to promote student understanding, • Builds from and extends concepts previously developed, • Strongly connects concepts to an overarching conceptual framework. 	Most of the content has a coherent sequence.	Some of the content has a coherent sequence.	Little of the content has a coherent sequence.
CONTEXT Content that is context-rich: <ul style="list-style-type: none"> • Is presented in an engaging context that is related to real world experiences and situations, • Builds on students' prior conceptions, • Facilitates the assimilation of new knowledge. 	Most key science concepts are addressed in a context-rich setting.	Some key science concepts are addressed in a context-rich setting.	Few key science concepts are addressed in a context-rich setting.

Houghton Mifflin

Biology and Biology Honors

- High amount of STEM and real-world application
- Multiple types of assessments
- Data analysis in each chapter to match new standards
- Inquiry build into the labs and supplements
- Essential question and big idea for each chapter to help with relevancy



Pearson - Higher Ed

AP Biology, Chemistry, Chemistry Honors, AP Chemistry, ICP (Integrated Chemistry and Physics), Physics I & II, Physics Honors, AP Physics

The *Mastering* platform delivers engaging, dynamic learning opportunities - focused on course objectives and responsive to reach student's progress - that are proven to help students absorb course material and understand difficult concepts.

- Respected authors in AP world
- Appropriate reading levels for high school students
- Real-world content and examples
- Well organized with abundance of resources for students and teachers

McGraw- Hill

Anatomy & Physiology, Zoology

Connect's rich content, abundant assignment types, and flexible policy options can be customized, while its powerful study tools adapt to individual student understanding and need.

- More suitable reading levels
- Appropriate depth and language
- Real-world content and examples
- Well organized with abundance of resources for students and teachers

Health Courses

Health (Pearson)

- Appropriate reading level
- Abundance of resources and activities
- Supplemental Growth & Human Development materials

Essentials of Athletic Injury Management

(McGraw-Hill)

- Appropriate reading level
- Content well organized and will serve both courses of Athletic Injuries
- On-line component provides flexibility and variety for student learning

Thank you

Questions