Office of Academics
Learning Division

Instructional Materials Plan 2018-2019

School Board Public Hearing
March 6, 2018

Presented By:		
Dr. Daryl Diamond, Director Innovative Learning	Dr. Nicole Mancini, Director Elementary Learning	Guy Barmoha, Director Secondary Learning
Dominic Church, Instructional Facilitator Innovative Learning	Sandra Reyes, Curriculum Supervisor Elementary Learning	Dr. Merilyn Johnson, Curriculum Supervisor Secondary Learning

Established 1915
BROWARD
County Public Schools

Instructional Materials Plan 2018-2019

Elementary Science Adoption

- K-5 Science

Secondary Science Adoption

- Middle Grades: Earth Science, Regular & Advanced
- Middle Grades: Life Science, Regular & Advanced
- Middle Grades: Physical Science, Regular & Advanced
- Middle Grades: Comprehensive Science, Regular & Advanced
- Anatomy & Physiology, Regular & Honors
- Biology, Regular & Honors
- Chemistry, Regular & Honors
- Environmental Science, Regular & Honors

Instructional Materials Plan 2018-2019

Secondary Science Adoption (cont'd)

- Marine Science, Regular & Honors
- Physical Science, Regular & Honors
- Physics, Regular & Honors
- Advanced Placement Biology
- Advanced Placement Chemistry
- Advanced Placement Environmental Science
- Advanced Placement Physics 1 & 2

Instructional Materials Plan 2018-2019

Florida Statute 1006.40(5) requires the following steps in approving recommended instructional materials for use district-wide.

- Public online access to student editions of the District recommended instructional materials (available from 12/5/17 – current).
- An open and noticed Public Hearing during which the public may comment on the recommended instructional materials (scheduled for March 6, 2018).
- An open and noticed board meeting to approve an annual instructional materials plan to identify any instructional materials that will be purchased through the district school board instructional materials review process (scheduled for March 20, 2018).

Instructional Materials Plan 2018-2019

Instructional Materials Adoption Process Self-Assessment Rubric

1. Our District consistently and effectively uses a review tool that prioritizes content and standards-alignment (including strong evidence of what the instructional shifts look like in materials).
2. We have a rigorous and transparent reviewer selection process that prioritizes content expertise and the ability to complete high quality work.
3. Our reviewers are trained such that they have a top-of-the-class grasp of the instructional shifts and applying the tool to materials.
4. We proactively manage publishers to emphasize the District's commitment to high quality content and standards alignment.
5. Our stakeholders are well-informed about our process and the rationale behind our decisions.

Instructional Materials Plan 2018-2019

1. Our District consistently and effectively uses a review tool that prioritizes content and standards-alignment (including strong evidence of what the instructional shifts look like in materials).

- Collaborated with TNTP and the Pilot Florida Implementation Network to develop the Science Instructional Materials Evaluation Tool (SIMET) which focused on 8 criteria designed to identify high-quality materials.
- Incorporated the SIMET into a digital review platform (EdValuate), enabling reviewers to conduct evaluations at any time or place and providing District staff with clear indications of which materials exemplified quality.

Instructional Materials Plan 2018-2019

2. We have a rigorous and transparent reviewer selection process that prioritizes content expertise and the ability to complete high quality work.

- We communicated the opportunity to participate directly to teachers via BCPS Alert and to principals via PIVOT memo.
- Principal recommendation was required to obtain a TDA for multiple days of reviews.
- Teachers needed to be currently teaching in the courses they would be reviewing.
- 105 reviewers participated (60 elementary and 45 secondary).

Instructional Materials Plan 2018-2019

3. Our reviewers are trained such that they have a top-of-the-class grasp of the instructional shifts and applying the tool to materials.

- Review sessions began with an in-depth training on the instructional shifts required to effectively teach Florida's Next Generation Sunshine State Standards (NGSSS).
- Review sessions also included training on using the SIMET via EdValuate to objectively assess materials based on 23 specific indicators over 8 broader criteria.

Instructional Materials Plan 2018-2019

4. We proactively manage publishers to emphasize the District's commitment to high quality content and standards alignment.

- We embedded the SIMET review tool in our course call so that publishers would know the criteria by which we would evaluate their materials.
- We developed guidelines for digital publisher presentations that focused on content and standards alignment.
- We shared feedback with publishers on how they might improve their instructional materials for this adoption.
- We ensured that adopted materials fit within the District's technology infrastructure.

Instructional Materials Plan 2018-2019

5. Our stakeholders are well-informed about our process and the rationale behind our decisions.

- Stakeholder groups notified of opportunity to participate via ParentLink, email, website, BCPS Mobile App and social media.
- Digital Access to all instructional materials being considered was shared with stakeholder groups via ParentLink, email, website, BCPS Alert, BCPS Mobile App, and social media.
- Physical access to materials made available at 21 locations across the District (7 each for ES, MS, and HS) and communicated along with digital access options.
- Opportunity to review and comment on potential instructional materials and final recommendations provided to all stakeholders.

Instructional Materials Plan 2018-2019

Elementary Science Adoption

Kindergarten through Fifth Grade (Core Adoption):
Accelerate Learning: STEMscopes 2.0

Kindergarten through Fifth Grade (Supplemental Materials):
Learning A-Z: Science A-Z
Scholastic: Classroom Leveled Readers
Accelerate Learning: Hands-on Materials Kits

Instructional Materials Plan 2018-2019

Secondary Science Adoption

Middle Grades: Earth, Life, and Physical Science (Regular & Advanced)
Accelerate Learning: STEMscopes 2.0

Middle Grades: Comprehensive Science (Regular & Advanced)
HMH: Science Dimensions

Middle Grades (Supplemental Materials):
Accelerate Learning: Hands-on Materials Kits

Instructional Materials Plan 2018-2019

Secondary Science Adoption (cont'd)

Anatomy & Physiology, Regular & Honors
EMC: Applied Anatomy & Physiology

Biology, Regular & Honors
HMH: Science Dimensions (Biology)

Chemistry, Regular & Honors
HMH: Florida Modern Chemistry

Environmental Science, Regular & Honors
Cengage/National Geographic: Environmental Science

Instructional Materials Plan 2018-2019

Secondary Science Adoption (cont'd)

Marine Science, Regular & Honors
McGraw-Hill: Marine Science

Physical Science, Regular & Honors
Discovery Education: Science Techbook

Physics, Regular & Honors
HMH: Florida Physics

Instructional Materials Plan 2018-2019

Secondary Science Adoption (cont'd)

Advanced Placement Biology
Pearson: Biology in Focus

Advanced Placement Chemistry
Cengage: AP Chemistry

Advanced Placement Environmental Science
Pearson: Environment: The Science Behind the Stories

Advanced Placement Physics 1 & 2
Cengage: College Physics (AP Edition)

Instructional Materials Plan 2018-2019

Adoption	Grade Levels	Number of Students	Cost of Adoption
Elementary Science	K	15973	STEMscopes: $7,733,887.40 Science A-Z: $1,707,678.00 Scholastic Readers: $500,000
	1	16028	
	2	16431	
	3	17391	
	4	17512	
	5	17265	
	ES Totals	**100,600**	**$9,941,565.40**

Final prices may vary due to final purchase requirements of the District.

Instructional Materials Plan 2018-2019

Adoption	Grade Levels	Number of Students	Cost of Adoption
Middle Grades: Earth, Life, Physical (Reg. & Adv.)	6-8	41722	$4,786,852.90
Middle Grades: Comp. Science (Reg. &Adv.)	6-8	667	$178,252.30
	MS Totals	**42389**	**$4,965,105.20**

Final costs may vary due to final purchase requirements of the District.

Instructional Materials Plan 2018-2019

Adoption	Grade Levels	Number of Students	Cost of Adoption
Anatomy & Physiology (Regular & Honors)	9-12	5466	$502,814.93
Biology (Regular & Honors)	9-12	17735	$2,156,135.45
Chemistry (Regular & Honors)	9-12	11881	$884,945.20
Environmental Science (Regular & Honors)	9-12	10204	$729,994.16
Marine Science (Regular & Honors)	9-12	6969	$935,972.00
Physical Science (Regular & Honors)	9-12	2080	$171,705.00
Physics (Regular & Honors)	9-12	3426	$238,837.2
	HS Totals	**57761**	**$5,620,403.94**

Final costs may vary due to final purchase requirements of the District.

Instructional Materials Plan 2018-2019

Adoption	Grade Levels	Number of Students	Cost of Adoption
Advanced Placement Biology	9-12	1079	$152,431.30
Advanced Placement Chemistry	9-12	555	$67,175.00
Advanced Placement Environmental Science	9-12	1239	$169,094.00
Advanced Placement Physics 1& 2	9-12	942	$104,602.70
	AP Totals	**3815**	**$493,303.00**
	Grand Totals	**204565**	**$21,020,377.54**

Final costs may vary due to final purchase requirements of the District.

Instructional Materials Plan 2018-2019

Elementary Science (Grades K-5) & Middle Grades: Earth/Life/Physical Science
STEMscopes 2.0
Accelerate Learning

- All lessons organized on the 5E Model of learning within each Florida state standard providing 20-30 opportunities within that standard for mastery.
- 100% written for students to master the Florida NGSSS standards and FCAT 2.0 Science Exam.
- Teachers facilitate of hands-on learning to develop independent learners.
- Engaging and exciting for students with curriculum that relates to the real world and develops cognitive thinking through inquiry based learning.

Reviewer: *STEMscopes student textbook was full of authentic higher order tasks that met the standards for that activity. Because of this I would choose this series. I want this series!!!!! I thought the tasks were student friendly and quite engaging. Step by step for both teacher and student. Higher order tasks like Argue-Claims-Evidence and Writing Science provides rigor within the standards for the grade level that connect the connect to the standard and challenges the student to use what they've learned to back it up.*

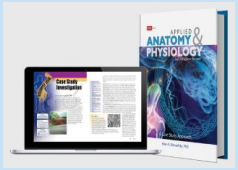
Instructional Materials Plan 2018-2019

Middle Grades: Comprehensive Science
Science Dimensions
Houghton Mifflin Harcourt (HMH)

- Promotes a discovery-based approach to meaningful science and engineering practices by thoughtfully integrating the Three Dimensions of Learning and Performance Expectations into the print, digital, hands-on, and professional development components.
- Built with a digital-first mentality, this program provides an authentic approach to increasing student achievement in science and preparing teachers for engineering instruction.

Reviewer: *This book made me truly excited to teach science. The layout and organization was phenomenal. After investigating and pouring over the content online, I was even more excited to think as this book as a possible resources for my classroom.*

Instructional Materials Plan 2018-2019



Anatomy & Physiology

Applied Anatomy & Physiology: A Case Study Approach

EMC

- Immediately captures students' attention and interest with a "Case Study Investigation" at the beginning of each chapter that presents a brief medical mystery involving the body system to be studied.
- Emphasizes real-world applications of anatomy and physiology concepts.
- Activities address critical thinking, practical application, comprehension, and Internet research.

Reviewer: The online resource enriches this textbook and activities to encourage students to take an interest in studying Anatomy & Physiology.

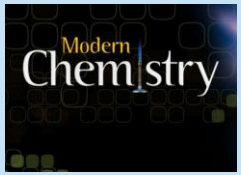
Instructional Materials Plan 2018-2019

Biology
Science Dimensions
Houghton Mifflin Harcourt (HMH)

- Promotes a discovery-based approach to meaningful science and engineering practices by thoughtfully integrating the Three Dimensions of Learning and Performance Expectations into the print, digital, hands-on, and professional development components.
- Built with a digital-first mentality, this program provides an authentic approach to increasing student achievement in science and preparing teachers for engineering instruction.

Reviewer: *This Exemplifies Quality and is the best [biology] text I have reviewed.*

Instructional Materials Plan 2018-2019



Chemistry
Florida Modern Chemistry
Houghton Mifflin Harcourt (HMH)

- Comprehensive high school chemistry textbook and digital program that presents a balanced and engaging approach to conceptual and problem-solving instruction.
- Designed to accommodate a wide range of student abilities within a general high school chemistry curriculum, the program offers a wealth of consistent support for reading and vocabulary, scientific inquiry, and problem solving,

Reviewer: *Though this resource goes above and beyond in content, it incorporates plenty of tools that are useful for even a new teacher. The online platform was also easy to navigate and its print teacher's edition places resources (or cites them) in case they want to be used. Exemplifies Quality. Recommended.*

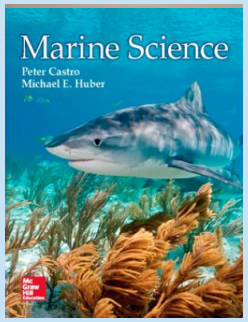
Instructional Materials Plan 2018-2019

Environmental Science
Environmental Science
Cengage/National Geographic

- Equips students with the inspiration and knowledge they need to make a difference solving today's environmental issues.
- Updated case studies designed to actively engage students
- Provides instructors the flexibility to foster critical thinking skills inside and outside of the classroom.

Reviewer: *This textbook series is most closely matched to the way I teach. I have on grade level to below grade level learners, and I feel they would be engaged and invested in this series. The activities are easy to understand and support the standards. They also are closely tied to the learning instead of just being a random activity - the students will be able to make the connections between activity and content. High quality textbook, good texture and weight of pages, pictures are vibrant and in focus. I would be thrilled to teach from this textbook.*

Instructional Materials Plan 2018-2019



Marine Science
Marine Science
McGraw-Hill

- Teachers are provided with websites to increase their own understanding of concepts as well as their students' understanding.
- Students are provided with many opportunities to demonstrate literacy, especially in designing and presenting their solutions to real-world problems.

Reviewer: *There are few marine texts that were developed for use at the high school level. Although McGraw-Hill's may be above the reading level for a majority of our students, with the help of the online adaptive reader this issue may be reduced. ESE and ELL support is provided in many ways. The smart book is a wonderful tool. I would highly recommend including this in our bundle.*

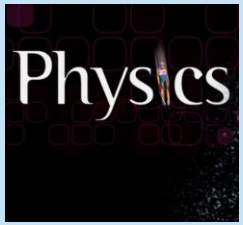
Instructional Materials Plan 2018-2019

Physical Science
Science Techbook
Discovery Education

- Changes the way students and teachers experience real-world science phenomena.
- One-stop shop, providing the perfect mixture of resources that teachers need to bring science to life.
- Built on the 5E model, Science Techbook combines different types of media to explain and reinforce science concepts.
- STEM connections are woven throughout and real-time student data helps to support differentiated instruction.

Reviewer: *I was WOWED by this resource. There are ample opportunities [for students] to show their understanding by using models, communication, creative writing and explanations.*

Instructional Materials Plan 2018-2019

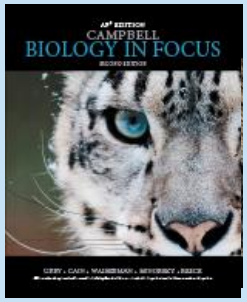


Physics
Florida Physics
Houghton Mifflin Harcourt (HMH)

- A comprehensive high school physics textbook and digital program with a balanced approach that melds concepts and problem solving.
- Accessible and engaging, with updated content, and refreshed sample problems.
- Helps students develop a conceptual foundation supported by a mathematically based presentation of the high school physics curriculum.
- Ongoing problem-solving strategies, practice, guidance, and feedback reinforce and strengthen critical skills.

Reviewer: *This is a great product. The physical book has seen some interesting improvements from the last edition. The online material provides a wealth of interactive simulations, labs, and documents. I feel that this book offers a happy middle ground between print material, online material, and labs.*

Instructional Materials Plan 2018-2019

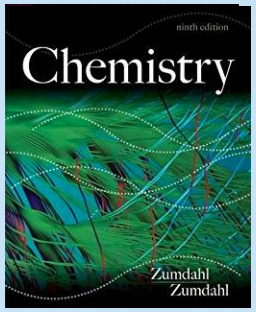


AP Biology
Biology in Focus
Pearson

- Presents core content required for the course, while retaining the clear explanations and figures that support the student.
- Highlights five basic themes that run through all areas of biology: evolution, energy and matter, information, interactions, and organization.
- Features Scientific Skills Exercises that support the Framework's Science Practices as students master data analysis, graphing, experimental design, and math skills.

Reviewer: *I highly recommend this text & its online resources. The strength for me with these materials are the study guide (Test Prep Series) and the resources on the web.*

Instructional Materials Plan 2018-2019

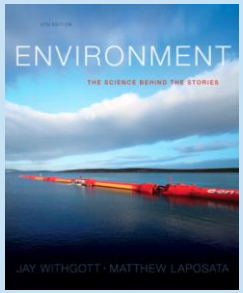


AP Chemistry
AP Chemistry
Cengage

- Combines a robust conceptual framework, a readable and engaging writing style, and an unparalleled selection of problems and exercises.
- Uses a thoughtful approach built on creative problem-solving techniques and critical thinking.
- An emphasis on modeling and interactive examples helps students learn how to approach and solve chemical problems -- to think like chemists -- so that they can apply the process of problem solving to all aspects of their lives.

Reviewer: *The text and online materials are closely aligned to the AP curriculum. The variety of formative assessments, the end of chapter questions, and worked examples provide great opportunities for students to develop deeper understanding of concepts. The instructor companion site, online book resources and multimedia library are great assets to the teacher.*

Instructional Materials Plan 2018-2019

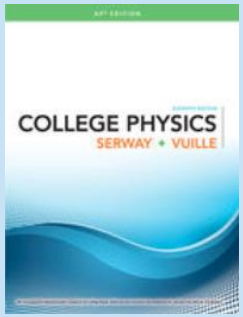


AP Environmental Science
Environment: The Science Behind the Stories
Pearson

- Provides the tools students need to explore the multi-faceted issues in environmental science, with a focus on navigating and reflecting on the gray areas at the juncture of science, policy, and ethics.
- Unique, integrated case-study approach.
- Uses current and compelling stories as the central framework from which all content is introduced and explained.
- Photo essays draw in visual learners, helping them better understand critical concepts, processes, and the implications their actions have on their community.

Reviewer: *EXCELLENT book. Book has little bias evident on topics. Even when presenting case studies with controversial topics, the authors have attempted to present multiple view points of the situation, and enough information to make informed decisions, as well as propose solutions. The supplemental materials are wonderful.*

Instructional Materials Plan 2018-2019



AP Physics 1 & 2
College Physics (AP Edition)
Cengage

- Helps students master physical concepts, improve their problem-solving skills, and enrich their understanding of the world around them.
- Provides a consistent problem-solving strategy and an unparalleled array of worked examples to help students develop a true understanding of physics.
- Digital learning solution includes online assignments, Interactive Video Vignettes, learning tools, and applications.

Reviewer: *This is the best of the three offerings. The textbook is well thought out and easy to read. The assessments, both in the book and the online materials, are excellent.*

Office of Academics
Learning Division

Instructional Materials Plan 2018-2019
School Board Public Hearing – March 6, 2018

The School Board of Broward County, Florida

Nora Rupert, Chair
Heather P. Brinkworth, Vice Chair

Robin Bartleman
Patricia Good
Abby M. Freedman
Donna P. Korn
Laurie Rich Levinson
Ann Murray
Dr. Rosalind Osgood

Robert W. Runcie, Superintendent of Schools

Established 1915
BROWARD
County Public Schools