Recommendation for Adoption of CORE Instructional Materials

For best results when filling out this form on your computer, download it first and open in Acrobat Reader or equivalent.

Prior to completing an application for adoption of core instructional materials, please review the Policy and Procedure #2020 for definitions and process directions.

Submission Information

Name of committee:

2023 High School Biology Textbook Adption Committee

Person(s) submitting this recommendation:

Larry Bencivengo and Jamie Cooke

Who are the members of the selection committee and what is their role in the district? (i.e., teacher, parent, administrator)

Larry Bencivengo (HS Science Teacher), Jamie Cooke (HS Science Teacher/Instructional Coach), Zachary McCauley (HS Science Teacher), Julia DeBroux (HS Science Teacher), Patty Weston (HS Science Teacher), Jamie Prescott (MISD Director of Learning Services)

Material Information

Title of material (book, magazine, digital media, etc.):

National Geographic - Biology

Publisher/Producer:

National Geographic | Cengage Learning, Inc.

Author:

Workman, Catherine and Catherine L. Quinlan

Copyright date:

2024

Proposed Use

School(s):

Mercer Island High School

Department or Subject:

Science Dept. - Biology

Course(s) or Grade(s):

10th Grade Biology

Request for approval as:

☑ Core Materials*

** Core materials require Board approval prior to implementation.*

Material Description

Description of the proposed materials:

National Geographic in partnership with Cengage Learning has created a new High School Biology textbook and supporting materials which include access to the Cengage Learning Management System, exclusive video content, review worksheets, a test generator for teachers and Virtual Labs allowing students to explore scientific questions related to each unit of study in the text.

Number of students impacted annually by materials:

approximately 350 (the entire 10th Grade class)

Grade level(s) and number of teachers using materials:

10th Grade Biology (usually 4 teachers)

What student and teacher needs will be met by these materials?

The Biological Sciences are a dynamic field. Our current textbook is more than 10 years old and does not include important advances such as the CRISPR-Cas9 gene-editing technology which is covered in detail in the new text. This textbook also includes extensive online support, such as an online textbook with read-aloud and other assistive technologies, a virtual Learning Log and Lab Notebook for each student, online Review Worksheets, and dynamic, open-ended Virtual Lab Investigations which have been created as exclusive content for this textbook. There are also exclusive video introductions for each chapter featuring a diverse group of scientists explaining their research which is related to the Driving Question for each unit of study in the text.

Material Description *continued*

How do these materials align with the Washington State Standards for the content and grade level? Please provide an alignment document, if available.

The Next Generation Science Standards (NGSS) are built into the textbook and supporting materials. The Text is designed around 6 Units of Study that feature important Disciplinary Core Ideas (DCIs), such as Ecosystem Dynamics (LS2C) or Inheritance of Traits (LS3A). Every Unit Introduces an open-ended Driving Question for students to explore that is directly related to the DCIs. Supporting materials, including Virtual Labs, allow teachers to create a 3-Dimensional Learning experience to help students answer the Unit's Driving Question. The textbook highlights specific Cross-Cutting Concepts (CCCs) and Science/Engineering Practices (SPEs) that are relevant to the material being presented, making the connections to NGSS explicit for students. The textbook and supporting materials are literally built to support the 3-Dimensional Learning experiences directed by the NGSS.

How do these materials align with other materials utilized in this content or grade level?

Even before Washington joined other states in adopting the NGSS, our Biology course featured what we now call 3-Dimensional Learning: presenting students with real-life phenomena that are inherently interesting, relevant and engaging, and which require a deep understanding of biological concepts and practices to understand. For example, all of our Biology students each year explore how emerging technologies could be applied to solving environmental problems we are studying in class. This project, based on the ExploraVision contest sponsored by Toshiba, requires students to implement Engineering Practices such as designing a technology and revising their initial idea based on new information, all focused on solving a significant real-world problem such as climate change or species extinction. These SEPs are part and parcel of the NGSS, and align well with the kinds of 3-Dimensional Learning experiences that are featured in the textbook and supporting materials.

How do the materials align with Mercer Island's Values, Vision, Mission and/or Five Fundamentals?

The videos featuring a diverse group of scientists who are passionately investigating scientific questions fits right in with the District's Vision of creating life-long learners. The textbook's focus on 3-Dimensional Learning Experiences directly supports the District's Mission to engage students in critical thinking and finding creative solutions to real-world problems. And the Virtual Lab Investigations encourage students to create meaning for themselves with rich, stimulating, open-ended simulations. For example, the Virtual Lab for Unit 1 simulates using a remotely-piloted underwater vehicle to explore the ocean bottom, collecting soil and water samples in an effort to understand the ecological role and life habits of the mysterious (and only recently discovered sea pig).

Evaluation of Materials

How did you evaluate these materials? Please provide general criteria and any supporting documentation.

The National Geographic - Biology textbook was selected after an extensive review process. An initial survey by Biology teachers identified four different publishers whom we invited to present to the Textbook Adoption Committee about their curricula. The Committee then narrowed the options down to two finalists - National Geographic "Biology" and McGraw Hill "Inspire - Biology." Both of these curricula were then evaluated in detail by the committee members, other teachers, parents, and students. Collectively we evaluated readability, layout and organization, representation of people from diverse backgrounds, and the extent of supporting materials. Attached, please find a summary of the evaluations by students and parents, the Textbook Adoption Evaluations submitted by each committee member, and copies of the Equity and Diversity evaluations filled out by various staff (3 for each of the two finalists). Overall, these various stakeholders all gave high ratings to both publisher's materials (e.g. students asked, "Would you recommend this textbook?" responded more than 4/5 for both).

Why did the team decide to adopt these materials?

In the end, the exciting and unique Virtual Lab Investigations and exclusive video content of National Geographic were primary factors that led to its selection. Both of the 2 finalists provide well-written textbooks that directly and explicitly aligned to the NGSS. They both include extensive supporting materials for teachers and students. Both curricula support 3-Dimensional Learning Experiences for students. But on the National Geographic - Biology textbook allows access to innovative, immersive Virtual Labs and a dozen or so videos of a very diverse group of researchers from different backgrounds, cultures and age-groups who convey their passion for scientific learning as they introduce the Driving Question for each chapter and describe the nature of the research question that they are investigating (and which students will also be exploring during the current Unit of study). Overall, the committee felt that we had two excellent choices which were rated very similarly by other stakeholders, so we made our choice based on the superior quality of the Virtual Labs and other supporting materials from National Geographic.

What are the strengths of the materials identified by constituent groups?

The textbook is well-written, attractive and organized in a sequence that matches how we already teach Biology. Unlike most Bio textbooks which begin with a unit on cells and biochemistry, this one starts by investigating ecological relationships - exactly way we have been teaching Biology at MIHS for nearly 3 decades. The e-version of the textbook is excellent and includes a read-aloud feature. The Cengage Learning Management System can link to Schoology so that all supporting materials can be assigned to students through the same LMS we currently use (several other departments currently use Cengage and have found the system to be relatively easy to navigate). We have already described the exclusive video content and Virtual Lab Investigations included, which stand apart from the offerings we have seen from other publishers in their production quality and the high-level thinking skills and student engagement that they promote. Cengage also includes test-development tools for teachers and virtual Learning Logs and Laboratory Notebooks for students that allows them to organize and reference the concepts, skills and facts they are studying throughout the school year.

What are the weaknesses of the materials identified by constituent groups?

Although the ratings for the two finalists were very similar, students identified the Inspire - Biology material as slightly easier to read and to use as a reference, despite the fact that a formal evaluation of Reading Level showed that the books have nearly identical average reading levels (12.1 for Inspire - Biology vs. 12.14 for National Geographic Biology). Some students evaluated the diversity of representation to be higher in the Inspire - Biology materials, but students only viewed the textbook, not the supporting materials (especially the videos from National Geographic which feature a very diverse group of practicing scientists). Since the overall ratings by other stakeholders were very similar for both textbooks (e.g. when asked, "Would you recommend this book?", students' average response was 4.33 for National Geographic Biology vs 4.47 for Inspire - Biology), the committee selected National Geographic Biology based on the other evaluation criteria described above.

Evaluation of Materials *continued next page...*

Evaluation of Materials *continued*

How do you intend to overcome the weaknesses of the materials?

As teachers, we provide additional direct instruction and supporting materials (such as Graphic Organizers) to help students understand the material we are studying. These supports should help to fill in any gaps in student knowledge gleaned from the readings. A textbook has never been the primary medium by which we expect students to learn content; we have traditionally used the textbook primarily as a supplemental resource that students can use to fill in details from lecture material, labs and investigations that occur in class. The great thing about the curricular materials from National Geographic is that they provide a means for introducing new content in a fun and engaging manner, so the textbook and its supporting materials will likely become more central to the learning occurring in our classrooms than it has been in the past.

What other materials were evaluated? Why were they not selected?

Materials from the following publishers were also evaluated and eliminated, either in the initial survey by Biology teachers or following the Publishers' presentations to the Adoption Committee, each one for various reasons:

Miller/Levine Biology from SAAVAS Learning/Prentice Hill (2019) - older textbook is likely to be updated soon; includes some disturbing photos of diseases/injuries that could be triggering, somewhat less inclusive language related to sex and gender, text is denser and less visually appealing

Biology Now from Norton Publishing (2021) - this textbook had similar downsides to Miller/Levine - less visual appeal, less inclusive language, disturbing photos, and denser text. Supporting materials lacked depth and higher level thinking skills compared to other finalists.

Implementation Plan

Describe the training or staff development that will be offered and available to implement these materials.

Cengage Learning Services said they will provide one free training for teachers prior to implementation next fall on how to use the LMS and access supporting materials for the textbook as part of the adoption process (any future trainings over the course of the adoption will require new arrangements and would be billed separately). Staff will meet as necessary prior to and during next school year to explore the learning materials themselves and plan Instruction.

When does the committee intend to implement these materials?

2023-24 School year

Implementation Plan *continued next page...*

Implementation Plan *continued*

What other supports will you have in place for the implementation of these materials?

The School District will include support for teachers to meet periodically outside of their regular planning times to coordinate delivery of instruction, create new lessons and investigations connected to the textbook materials, and share experiences/evaluate implementation in an ongoing manner. District and High School technical support staff will help to integrate the compnents of the Cengage LMS with Schoology, a task they have performed for previous adoptions in other departments.

Estimated cost of materials (feel free to attach vendor proposals, if available):

Item Title	Number of Items	Cost per Item	Total Cost
Student Textbook & Online Subscription (6 yrs)	400	$135	$54,000
Student Textbook only	60	$105	$6,300
Teacher Edition & Online Subscription	6	$135	$810
Total Cost (estimated w/ tax)	466	var.	$67,420

Readability

Complete this section if you are proposing a fiction or non-fiction piece (text, textbook, novel, etc.; not applicable for teacher materials)

Readability Report

Please copy and paste (or type) a selected paragraph, that is indicative of the average language in the text, into the following site: www.online-utility.org/english/readability_test_and_improve.jsp

The online site will produce a readability analysis for the text. Please complete the chart below with the results from the analysis.

Readability Formula	Average (Grade Levels)
Gunning Fog Index	14.6
Coleman Liau Index	12
Flesh Kincaid Grade Level	10.6
ARI (Automated Readability Index)	11.5
SMOG	12
Average Grade Level:	12.14

Approvals

Approved by Curriculum Review Team	Date
Approved by School Principal	Date
Approved by Instructional Materials Committee	Date
Approved by Superintendent or Designee	Date

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Equity and Diversity Alignment Review

For best results when filling out this form on your computer, download it first and open in Acrobat Reader or equivalent.

In accordance with the mission, vision, and values of the Mercer Island School District, all students shall have equitable opportunities to learn and meet high standards. All adopted instructional materials shall be culturally relevant and free of bias to the best degree possible. Instructional materials considered for adoption must be reviewed for their multicultural and anti-bias qualities. Selected materials shall accurately represent all groups including ethnically diverse groups, women and those with disabilities in roles which challenge common misconceptions and stereotypes. Therefore, criteria sections on stereotyping, perspectives, and culturally responsive instructional strategies must be included in all screening for adoption of instructional materials.

Please have at least three people complete the *Equity and Diversity Alignment Review*. Two of the three participants must be from outside of the review committee.

Title of material under consideration:

National Geographic|Cengage Learning - Biology

Name of person completing the *Equity and Diversity Alignment Review for* material under consideration:

Larry Bencivengo

Affiliation to the Mercer Island School District:

- ☑ Teacher
- ☐ Staff Member
- ☐ Administrator
- ☐ Parent
- ☐ Student
- ☐ Community Member
- ☐ Other _____

Stereotypes: Instructional Materials avoid labels or role stereotyping which demean historically marginalized groups (e.g., women, people of color and the disabled) and are free of ethnocentric, gender biased or elitist language patterns. We ask that instructional materials deliver content and skill development without reinforcing stereotypes of any group of people.

Stereotyping	Consistently	Occasionally	Never	N/A
1. All groups are presented in equitable proportion in personal, professional and vocational roles and activities (e.g., African-American women are portrayed as physicians).	☑	☐	☐	☐
2. All groups are equally portrayed in positions of leadership, responsibility, activism and problem solving (i.e., passive roles are not relegated to women, people of color, and the disabled).	☑	☐	☐	☐

Stereotyping *continued*	Consistently	Occasionally	Never	N/A
3. Similar emotions are portrayed by males and females.	☑	☐	☐	☐
4. Whenever developments or achievements in a field are presented, the contributions by diverse groups are included and discussed (i.e., seek inventions and contributions by diverse ethnic groups).	☑	☐	☐	☐
5. Instructional materials reflecting contemporary society refer to and illustrate an equitable and accurate proportion of males and females.	☑	☐	☐	☐
6. Whenever world views are presented, they include the perspective of the culture they are written about rather than being dominated by a Eurocentric, patriarchic or colonial perspective.	☐	☑	☐	☐
7. People of color, women, and people with disabilities are depicted in non-stereotypical roles (e.g., Asian-Americans are not always depicted as the "model minority").	☑	☐	☐	☐
8. When women, people of color and the disabled are depicted, they are portrayed in a broad range of socio-economic classes.	☐	☐	☐	☐
9. When ethnic and cultural groups are portrayed, there is a balance of traditional and nontraditional roles (e.g., Native Americans are not all shown in native clothing or only in historical contexts).	☑	☐	☐	☐
10. Word problems and case studies include multi-ethnic names (e.g., Tamika instead of Sarah; Mohammed instead of John).	☐	☑	☐	☐
11. Instruction materials avoid elitist and demeaning language patterns (e.g., phrases such as "primitive cultures", "handicapped", "mankind", "oriental", etc.).	☑	☐	☐	☐

Perspectives: Instructional materials such as textbooks, teachers' editions, supplementary books, videotapes, and all ancillary materials describe events from the perspectives of different gender, racial, ethnic, cultural, religious, sexual orientation and ability groups.

Perspectives	Consistently	Occasionally	Never	N/A
1. Instructional materials help students understand the ways in which the unique experiences of people or groups cause them to view the same historical and social events differently.	☑	☐	☐	☐
2. Instructional materials help students to understand that knowledge is socially constructed and reflects the personal experiences and the social, political, and economic contexts in which they live and work.	☐	☑	☐	☐
3. Differences in customs and daily living are portrayed respectfully.	☑	☐	☐	☐
4. Materials deal openly and accurately with the impact of bias in the workplace and society. (e.g., questions in the chapter that engage students to think critically about why people are poor rather than just exposing them to images of poverty).	☐	☑	☐	☐
5. Imbalance or inequality is interpreted in both historical and contemporary contexts. (e.g., Latinos are not always shown as menial laborers but are also portrayed in professional roles).	☐	☑	☐	☐
6. Instructional materials show how stereotyping, bias, and labeling can result in prejudice and discrimination.	☐	☑	☐	☐
7. Anthologies and suggested readings include works by women and ethnically diverse authors.	☑	☐	☐	☐
8. Students see themselves and their culture reflected in an accurate and respectful manner.	☑	☐	☐	☐

Culturally responsive instructional strategies and assessment: Provides a variety of ways in which students can be encouraged to build on their skills and learning while at the same time validates their experiences, values, and traditions.

Culturally Responsive Instructional Strategies and Assessment	Consistently	Occasionally	Never	N/A
1. The teacher's edition provides accurate racial, ethnic and cultural information and provides suggestions for countering bias.	☐	☑	☐	☐
2. The assessments in instructional materials are culturally sensitive and measure complex cognitive and social skills using a variety of assessment strategies.	☐	☑	☐	☐
3. The materials engage students across varied learning styles and multiple intelligences: kinesthetic, logical, interpersonal, intrapersonal, musical/ rhythmic, verbal, and visual/spatial.	☑	☐	☐	☐
4. The materials provide ways for students to analyze the source and the perspective of the content presented (e.g., Native American and European perspectives regarding Christopher Columbus).	☐	☑	☐	☐
5. The materials encourage students to listen, think, illustrate, speak, read and write.	☑	☐	☐	☐

Adapted from Banks, J., *Diversity Within Unity: Essential Principles for Teaching and Learning in a Multicultural Society* (2001). Adapted from REACH Center for Multicultural Education.

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Equity and Diversity Alignment Review

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In accordance with the mission, vision, and values of the Mercer Island School District, all students shall have equitable opportunities to learn and meet high standards. All adopted instructional materials shall be culturally relevant and free of bias to the best degree possible. Instructional materials considered for adoption must be reviewed for their multicultural and anti-bias qualities. Selected materials shall accurately represent all groups including ethnically diverse groups, women and those with disabilities in roles which challenge common misconceptions and stereotypes. Therefore, criteria sections on stereotyping, perspectives, and culturally responsive instructional strategies must be included in all screening for adoption of instructional materials.

Please have at least three people complete the *Equity and Diversity Alignment Review*. Two of the three participants must be from outside of the review committee.

Title of material under consideration:

Biology – National Geographic

Name of person completing the *Equity and Diversity Alignment Review for* material under consideration:

Shannon Sue

Affiliation to the Mercer Island School District:

- [x] Teacher
- [ ] Staff Member
- [ ] Administrator
- [ ] Parent
- [ ] Student
- [ ] Community Member
- [ ] Other _____

Stereotypes: Instructional Materials avoid labels or role stereotyping which demean historically marginalized groups (e.g., women, people of color and the disabled) and are free of ethnocentric, gender biased or elitist language patterns. We ask that instructional materials deliver content and skill development without reinforcing stereotypes of any group of people.

Stereotyping	Consistently	Occasionally	Never	N/A
1. All groups are presented in equitable proportion in personal, professional and vocational roles and activities (e.g., African-American women are portrayed as physicians).	[x]	[ ]	[ ]	[ ]
2. All groups are equally portrayed in positions of leadership, responsibility, activism and problem solving (i.e., passive roles are not relegated to women, people of color, and the disabled).	[x]	[ ]	[ ]	[ ]

Stereotyping *continued*	Consistently	Occasionally	Never	N/A
3. Similar emotions are portrayed by males and females.	☒	☐	☐	☐
4. Whenever developments or achievements in a field are presented, the contributions by diverse groups are included and discussed (i.e., seek inventions and contributions by diverse ethnic groups).	☒	☐	☐	☐
5. Instructional materials reflecting contemporary society refer to and illustrate an equitable and accurate proportion of males and females.	☒	☐	☐	☐
6. Whenever world views are presented, they include the perspective of the culture they are written about rather than being dominated by a Eurocentric, patriarchic or colonial perspective.	☒	☐	☐	☐
7. People of color, women, and people with disabilities are depicted in non-stereotypical roles (e.g., Asian-Americans are not always depicted as the "model minority").	☒	☐	☐	☐
8. When women, people of color and the disabled are depicted, they are portrayed in a broad range of socio-economic classes.	☒	☐	☐	☐
9. When ethnic and cultural groups are portrayed, there is a balance of traditional and nontraditional roles (e.g., Native Americans are not all shown in native clothing or only in historical contexts).	☒	☐	☐	☐
10. Word problems and case studies include multi-ethnic names (e.g., Tamika instead of Sarah; Mohammed instead of John).	☒	☐	☐	☐
11. Instruction materials avoid elitist and demeaning language patterns (e.g., phrases such as "primitive cultures", "handicapped", "mankind", "oriental", etc.).	☒	☐	☐	☐

Perspectives: Instructional materials such as textbooks, teachers' editions, supplementary books, videotapes, and all ancillary materials describe events from the perspectives of different gender, racial, ethnic, cultural, religious, sexual orientation and ability groups.

Perspectives	Consistently	Occasionally	Never	N/A
1. Instructional materials help students understand the ways in which the unique experiences of people or groups cause them to view the same historical and social events differently.	☒	☐	☐	☐
2. Instructional materials help students to understand that knowledge is socially constructed and reflects the personal experiences and the social, political, and economic contexts in which they live and work.	☒	☐	☐	☐
3. Differences in customs and daily living are portrayed respectfully.	☒	☐	☐	☐
4. Materials deal openly and accurately with the impact of bias in the workplace and society. (e.g., questions in the chapter that engage students to think critically about why people are poor rather than just exposing them to images of poverty).	☐	☒	☐	☐
5. Imbalance or inequality is interpreted in both historical and contemporary contexts. (e.g., Latinos are not always shown as menial laborers but are also portrayed in professional roles).	☒	☐	☐	☐
6. Instructional materials show how stereotyping, bias, and labeling can result in prejudice and discrimination.	☒	☐	☐	☐
7. Anthologies and suggested readings include works by women and ethnically diverse authors.	☒	☐	☐	☐
8. Students see themselves and their culture reflected in an accurate and respectful manner.	☒	☐	☐	☐

Culturally responsive instructional strategies and assessment: Provides a variety of ways in which students can be encouraged to build on their skills and learning while at the same time validates their experiences, values, and traditions.

Culturally Responsive Instructional Strategies and Assessment	Consistently	Occasionally	Never	N/A
1. The teacher's edition provides accurate racial, ethnic and cultural information and provides suggestions for countering bias.	☐	☒	☐	☐
2. The assessments in instructional materials are culturally sensitive and measure complex cognitive and social skills using a variety of assessment strategies.	☒	☐	☐	☐
3. The materials engage students across varied learning styles and multiple intelligences: kinesthetic, logical, interpersonal, intrapersonal, musical/ rhythmic, verbal, and visual/spatial.	☒	☐	☐	☐
4. The materials provide ways for students to analyze the source and the perspective of the content presented (e.g., Native American and European perspectives regarding Christopher Columbus).	☐	☒	☐	☐
5. The materials encourage students to listen, think, illustrate, speak, read and write.	☒	☐	☐	☐

Adapted from Banks, J., *Diversity Within Unity: Essential Principles for Teaching and Learning in a Multicultural Society* (2001). Adapted from REACH Center for Multicultural Education.

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Equity and Diversity Alignment Review

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Title of material under consideration:

Biology (National Geographic) 2024

Name of person completing the *Equity and Diversity Alignment Review for* material under consideration:

Clay Laughary

Affiliation to the Mercer Island School District:

- [x] Teacher
- [ ] Staff Member
- [ ] Administrator
- [ ] Parent
- [ ] Student
- [ ] Community Member
- [ ] Other _____

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Stereotyping *continued*	Consistently	Occasionally	Never	N/A
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10. Word problems and case studies include multi-ethnic names (e.g., Tamika instead of Sarah; Mohammed instead of John).	☐	☐	☐	☒
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2. Instructional materials help students to understand that knowledge is socially constructed and reflects the personal experiences and the social, political, and economic contexts in which they live and work.	☒	☐	☐	☐
3. Differences in customs and daily living are portrayed respectfully.	☒	☐	☐	☐
4. Materials deal openly and accurately with the impact of bias in the workplace and society. (e.g., questions in the chapter that engage students to think critically about why people are poor rather than just exposing them to images of poverty).	☐	☒	☐	☐
5. Imbalance or inequality is interpreted in both historical and contemporary contexts. (e.g., Latinos are not always shown as menial laborers but are also portrayed in professional roles).	☐	☒	☐	☐
6. Instructional materials show how stereotyping, bias, and labeling can result in prejudice and discrimination.	☐	☐	☐	☒
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3. The materials engage students across varied learning styles and multiple intelligences: kinesthetic, logical, interpersonal, intrapersonal, musical/ rhythmic, verbal, and visual/spatial.	☐	☒	☐	☐
4. The materials provide ways for students to analyze the source and the perspective of the content presented (e.g., Native American and European perspectives regarding Christopher Columbus).	☐	☐	☐	☒
5. The materials encourage students to listen, think, illustrate, speak, read and write.	☒	☐	☐	☐

Adapted from Banks, J., *Diversity Within Unity: Essential Principles for Teaching and Learning in a Multicultural Society* (2001). Adapted from REACH Center for Multicultural Education.

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Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: Jamie Cook Date: 2/9/23

Text Name: Nat. Geo: Biology Readability Level: 10.6

Author: Nat. Geo ?

Publisher: Cengage Learning. Copyright: 2024

Rating Scale: 4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	
4	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e. Cross-cutting Concepts & Science/Engineering Practices).	
3	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	
4	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	
4	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e. metacognitive skills such as perseverance, problem-solving, etc.).	

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3.5	The materials address depth as well as breadth.	Good depth
3	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	
4	The materials provide hands-on experiences when appropriate.	
3.5	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	
3.5	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
4	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	Great intro connection that continues through the unit!
2	Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.	Binary reference to gender

23.5

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The reading level is appropriate to the grade level.	10.6 is acceptable
~~3~~	The diagrams and illustrations used to explain concepts engage and challenge students.	
4	The organizational structure of the content makes sense and is teachable.	
	The content features representation of	

33.5

3.5	persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	Good career & in field persons represented
4	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts and vocabulary.	Awesome!
~~3~~ 3.5	The layout of the curriculum is engaging and not distracting.	
4	The text is well bound, durable, and portable.	
4	The text is available online.	& on their phone
3.5	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	Only book with specific online labs made for each unit
~~3~~ 3	The instructional materials support the teacher in the teaching and assessment of the NGSS.	
3	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	
3	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
3	The quality of the assessment tools is high.	

~~35~~ 34.5

Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: Zachary McCauley
Date: 2/9/23

Text Name: National Geographic Biology
Readability Level: _____

Author: National Geographic

Publisher: Cengage
Copyright: 2024

Rating Scale: 4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	
3	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e., Cross-cutting Concepts & Science/Engineering Practices).	Text makes some explicit connections to the 3 Dimensions of NGSS, but not as much as some other texts reviewed
3	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	Text directs students to some inquiry-based activities, but not as many as some other texts
4	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	
3	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e., metacognitive skills such as perseverance, problem-solving, etc.).	

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address depth as well as breadth.	
4	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	
3	The materials provide hands-on experiences when appropriate.	
4	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	
	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
4	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	Text has a consistent focus on modern scientists in specific contexts doing research relevant to each unit. Videos and activities center these scientists. The scientists represent diverse backgrounds and are from around the world.
3.5	Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.	

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3.5	The reading level is appropriate to the grade level.	
4	The diagrams and illustrations used to explain concepts engage and challenge students.	
4	The organizational structure of the content makes sense and is teachable.	

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The content features representation of persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	
4	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts, and vocabulary.	
4	The layout of the curriculum is engaging and not distracting.	
4	The text is well bound, durable, and portable.	Textbook is slimmer and lighter than some other textbooks.
4	The text is available online.	Also available as a mobile app, I believe, and allowing students to annotate text online or with the mobile app.
3	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	The virtual labs seem very high quality (though only one was available at the time of review), but there is only one per unit. There are other activities mentioned in the text, however, for students to do.
4	The instructional materials support the teacher in the teaching and assessment of the NGSS.	
4	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	
4	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
3	The quality of the assessment tools is high.	

Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: _____Larry Benciengo_____ Date: __3/7/23__

Text Name: National Geographic Biology Readability Level: _____

Author: _____Workman, *et al*_____

Publisher: ___National Geographic_____ Copyright: __2024_

Rating Scale: 4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	NGSS standards built in and highlighted w/in student text (CCC & SEPs)
4	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e. Cross-cutting Concepts & Science/Engineering Practices).	numerous questions for discussion, activities, labs (including virtual labs & min-labs) built into text. CCCs/SEPs specifically called ut & highlighted in text. Each chapter has a case study to investigate
4	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	Activities at end of many chapters require students to research/suggest solutions to human problems
4	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	
3	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e. metacognitive skills such as perseverance, problem-solving, etc.).	

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address depth as well as breadth.	
3	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	
3	The materials provide hands-on experiences when appropriate.	
4	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	
4	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
4	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	
3	Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.	includes some inclusive language ("Genetically male/female")

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The reading level is appropriate to the grade level.	At or above 10th grade level - comparable to other texts we examined and lower than some
4	The diagrams and illustrations used to explain concepts engage and challenge students.	
4	The organizational structure of the content makes sense and is teachable.	Structure allows “teaching from the text” as well as using the text simply as a reference/supplement to teacher-designed curriculum

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The content features representation of persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	Esp. the supplemental videos that introduce each topic; a diverse array of scientists (various ages, genders, races, etc.) introduce each topic and describe their research. Videos provide context and present scientists as a diverse group from around the world
4	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts and vocabulary.	
4	The layout of the curriculum is engaging and not distracting.	
3	The text is well bound, durable, and portable.	We have only a Pre-Print copy as the text is brand new (2024 copyright)
4	The text is available online.	
4	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	Esp. the Virtual Labs - exciting investigations such as a simulated submersible used to take water & soil samples from the ocean floor in an open-ended investigation, etc.
4	The instructional materials support the teacher in the teaching and assessment of the NGSS.	Text and supporting materials are directly keyed to NGSS with color-coded “callouts” that highlight connections to Science/Engineering Practices & Cross-Cutting Concepts
4	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	Good review materials and Virtual Labs could either be highly directed or extremely open-ended, depending on the learning objectives and abilities of different students.
4	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
3	The quality of the assessment tools is high.	Pretty standard (except for the Virtual Labs)

82.5

Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: Jamie Cook
Date: 2/9/23
Text Name: Inspire Science! Biology
Readability Level: 11.5
Author: Alton Biggs et. al.
Publisher: McGraw Hill
Copyright: 2020

Rating Scale:
4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	3 Levels of NGSS
4	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e. Cross-cutting Concepts & Science/Engineering Practices).	Identified
3	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	Yes. Need more examples
4	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	Many options / video & interactive
3.5	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e. metacognitive skills such as perseverance, problem-solving, etc.).	Gives teacher feedback on metacognition.

17.5

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The materials address depth as well as breadth.	
3	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	
4	The materials provide hands-on experiences when appropriate.	
4	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	
3	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
4	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	
3	**Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.**	"Biological sex" instead of "sex".

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CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
2	The reading level is appropriate to the grade level.	11.5 Eleventh grade may be too high.
3	The diagrams and illustrations used to explain concepts engage and challenge students.	
3.	The organizational structure of the content makes sense and is teachable.	Good sequence. "Modules" may be difficult to follow.

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CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The content features representation of persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	
3	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts and vocabulary.	
3	The layout of the curriculum is engaging and not distracting.	
4	The text is well bound, durable, and portable.	
4	The text is available online.	
3	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	online Labs are still in the "works" & unknown.
3	The instructional materials support the teacher in the teaching and assessment of the NGSS.	
3	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	
3	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
4	The quality of the assessment tools is high.	good options for making & assessing learning. Feedback is instant.

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Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: Jamie Cooke
Date: 1/25/23
Text Name: Biology Now
Readability Level: 9.6 - Genetics intro
Author: Hartman, Scudellari, Malone, Brewer
Publisher: Norton
Copyright: 2021 3rd edition

Rating Scale:
4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	
4	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e. Cross-cutting Concepts & Science/Engineering Practices).	
3	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	
3	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	
3	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e. metacognitive skills such as perseverance, problem-solving, etc.).	

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3	The materials address depth as well as breadth.	
3	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	
3	The materials provide hands-on experiences when appropriate.	
3	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	
3	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
~~3~~ 4	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	Great connection & continuous references.
2	Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.	Binary gender terms used. "Male" Female"

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CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The reading level is appropriate to the grade level.	
~~3~~ 3	The diagrams and illustrations used to explain concepts engage and challenge students.	~~Some pictures are graphic & off putting~~
4	The organizational structure of the content makes sense and is teachable.	
	The content features representation of	

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3	persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	
2	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts and vocabulary.	Some graphic photos
3	The layout of the curriculum is engaging and not distracting.	
4	The text is well bound, durable, and portable.	
4	The text is available online.	
3	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	Not as well integrated with Schoology
3	The instructional materials support the teacher in the teaching and assessment of the NGSS.	
3	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	
3	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
~~4~~	The quality of the assessment tools is high.	Great InQuisitive adaptive assessment

(32) 31

Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: Jamie Cooke
Date: 2/9/23
Text Name: Miller Levine's Biology
Readability Level: 8.7
Author: Miller & Levine
Publisher: SAVVAS / Prentice Hall
Copyright: 2019

Rating Scale:
4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	
3	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e. Cross-cutting Concepts & Science/Engineering Practices).	
3	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	
3	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	
3	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e. metacognitive skills such as perseverance, problem-solving, etc.).	

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
2.5	The materials address depth as well as breadth.	Topic were extensive but lacked some depth
3	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	
3	The materials provide hands-on experiences when appropriate.	
2.5	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	~~Much of~~ Questions often didn't reach higher level thinking
2.5	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
3	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	Could be more
2	**Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.**	Typical "male" "female" language used. Binary & not inclusive.

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The reading level is appropriate to the grade level.	A bit low, but accessible.
3	The diagrams and illustrations used to explain concepts engage and challenge students.	
3	The organizational structure of the content makes sense and is teachable.	

27.5

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The content features representation of persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	
3	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts and vocabulary.	
3	The layout of the curriculum is engaging and not distracting.	
2.5	The text is well bound, durable, and portable.	pages are thin, could rip easy
4	The text is available online.	
4	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	
3	The instructional materials support the teacher in the teaching and assessment of the NGSS.	
4	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	
3	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
3	The quality of the assessment tools is high.	

35.5

Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: Zachary McCauley
Date: 2/9/23

Text Name: Inspire Biology
Readability Level: _____

Author: _____

Publisher: McGraw Hill
Copyright: 2020

Rating Scale: 4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	Lessons and materials explicitly identify connections to DCI's, SEP's, and CCC's
4	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e., Cross-cutting Concepts & Science/Engineering Practices).	Lessons and materials explicitly identify connections to DCI's, SEP's, and CCC's
4	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	Lessons and materials explicitly identify connections to DCI's, SEP's, and CCC's
4	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	
3	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e., metacognitive skills such as perseverance, problem-solving, etc.).	

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address depth as well as breadth.	
4	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	4: LearnSmart system adaptive online assessment for readings—directs students toward questions they missed. Also provides data to teacher about student progress.
4	The materials provide hands-on experiences when appropriate.	
4	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	
4	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
4	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	
2-3	Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.	Uses "normal male" instead of language like "typical male"

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The reading level is appropriate to the grade level.	
3	The diagrams and illustrations used to explain concepts engage and challenge students.	
4	The organizational structure of the content makes sense and is teachable.	

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The content features representation of persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	
4	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts, and vocabulary.	
3	The layout of the curriculum is engaging and not distracting.	The units are organized into modules, which are then organized into lessons. This is slightly confusing. We found it might be helpful to refer to the modules as "chapters" instead.
3.5	The text is well bound, durable, and portable.	Textbook is larger than some other textbooks, but it is not too heavy.
4	The text is available online.	Both in a browser as a mobile app. The text can be annotated in the browser and mobile versions.
4	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	
4	The instructional materials support the teacher in the teaching and assessment of the NGSS.	
3	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	
4	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
3	The quality of the assessment tools is high.	

Science Instructional Materials Selection Criteria
Mercer Island School District

Reviewer: __Larry Bencivengo_____ Date: _1/16/23__

Text Name: __HMH Biology_____ Readability Level: __9.59__

Author: _____Nowicki_____

Publisher: ___Hooughton Mifflin Harcourt____ Copyright: _2018__

Rating Scale: 4 Exceeds standard
3 Meets standard
2 Below standard
1 N/A

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The materials address the Next Generation Science Standards (NGSS) related to the Disciplinary Core Ideas (DCIs) of Structure & Function (LS1), Systems (LS2), Genetics (LS3), and Evolution (LS4).	content is great - I have serious concerns about the organization & presentation
3	The materials address the NGSS related to knowledge and skills to do scientific inquiry, (i.e. Cross-cutting Concepts & Science/Engineering Practices).	Some of the activities seem confusing (e.g. Biomagnification on p. 154), but there are several Hands-On Labs and Data Analysis activities (at least one per chapter)
2	The materials address the NGSS related to apply knowledge and skills of science and technology to design solutions to human problems or meet challenges (Science/Engineering Practices).	there is some of this sort of activity at the ends of chapters, but not very much
4	The materials address a balance of content, teacher-directed inquiry, and student-led inquiry.	many points for student discussion or other activities included within the text
2	The materials provide an opportunity for students to demonstrate Habits of the Mind (i.e. metacognitive skills such as perseverance, problem-solving, etc.).	??

CATEGORY #1 CONTENT

RATING	COMPONENT	EVIDENCE/COMMENTARY
2	The materials address depth as well as breadth.	
3-4	The materials meet the needs of the student who does not meet standards as well as the student who exceeds standards.	each chapter has non-technical explanations from Randall Munroe who did *What If?* But it is unclear to me whether these may be more confusing than helpful (are "tree eggs" *seeds*?)
2	The materials provide hands-on experiences when appropriate.	Some
4	The curricular materials incorporate higher level thinking skills (i.e. application, analysis & synthesis).	Many opportunities to apply understanding, analyze data, synthesize ideas, etc. Almost seems as though intended to be read *in class*
3	The curriculum materials incorporate activities that stimulate student participation and critical thinking.	
4	The curriculum makes connections to the real world and encourages application of the concepts and skills covered.	Consistently strong connections in each chapter
2	Content about human biology acknowledges and affirms natural variation in gender, sex, and sexuality.	very conventional treatment

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
3	The reading level is appropriate to the grade level.	
3	The diagrams and illustrations used to explain concepts engage and challenge students.	
2	The organizational structure of the content makes sense and is teachable.	overall organization is conventional (excellent intro. chapter discusses feedback loops, etc., but I feel lost trying to navigate the book - lacks landmarks;never know which chapter I'm in!

CATEGORY #2 ORGANIZATION & TEXT FEATURES

RATING	COMPONENT	EVIDENCE/COMMENTARY
4	The content features representation of persons from diverse populations and backgrounds. (For example, representation for individuals of different race, gender, sexuality, and ability/disability.)	early chapters especially
2-3	The curriculum is visually pleasing to students, including appropriate type and font, use of color, length of chapters, photos, graphs, highlighted concepts and vocabulary.	pastel colors are probably good for students, but I find the organization confusing - often cannot tell which chapter you are reading. Photos repeat within a chapter, which I find confusing.
3	The layout of the curriculum is engaging and not distracting.	
3	The text is well bound, durable, and portable.	binding is good - not sure about quality and durability of the pages
	The text is available online.	
	The text is supported by a variety of **useful** supplemental materials and includes extensive online activities and resources.	
2	The instructional materials support the teacher in the teaching and assessment of the NGSS.	not specifically keyed to NGSS or 3D Teaching/Learning
4	The instructional materials support teaching the full range of learners. (Different learning styles, different learning abilities, and multilingual learners)	
	The instructional materials provide tools that encourage and support multiple methods of assessment, both formal and informal.	
	The quality of the assessment tools is high.	

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Summary of Student Input

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	4.33 X				
The text is informative	4.67 X				
The diagrams and pictures are helpful	4.44 X				
Sidebars are relevant and clear	4.09 X				
I would recommend this textbook	4.33 X				
Comments:					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	4.72 X				
The text is informative	4.58 X				
The diagrams and pictures are helpful	4.36 X				
Sidebars are relevant and clear	4.06 X				
I would recommend this textbook	4.47 X				
Comments :					

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

18

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative		✓			
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook		✓			
Comments:					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear	✓				
I would recommend this textbook	✓				
Comments : Very informative Issue there was a lot of small print.					

BSU

At a glance, more representation in pictures (i.e. females, races, cultures)

QSA

1

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		•			
The text is informative			•		
The diagrams and pictures are helpful		• ←	X		
Sidebars are relevant and clear		•			
I would recommend this textbook		•			
Comments: Says "typically" for sex determination (XX/XY), but also says "biologically" male/female in Ch 12.1 (doesn't explicitly mention intersex)					

this one looks nicer →

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	•				
The text is informative		•			
The diagrams and pictures are helpful		•			
Sidebars are relevant and clear		•			
I would recommend this textbook		•			
Comments : Does not say "typically" for sex determination (XX/XY), but does say "genetically" male/female in 9.2 (doesn't explicitly mention intersex)					

(2)

Biology Textbook Title: *National Geographic Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative	✓				
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear	✓				
I would recommend this textbook		✓			
Average for Recommend Text:					

Biology Textbook Title: *Inspire Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear			✓		
I would recommend this textbook	✓				
Average for Recommend Text :					

Biology Textbook Title: *National Geographic Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear					
I would recommend this textbook	✓				
Average for Recommend Text:					

Biology Textbook Title: *Inspire Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful			✓		
Sidebars are relevant and clear			✓		
I would recommend this textbook			✓		
Average for Recommend Text :					

4

Biology Textbook Title: *National Geographic Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear	✓		✓		
I would recommend this textbook	✓				
Average for Recommend Text:					

Biology Textbook Title: *Inspire Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written			✓		
The text is informative		✓			
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear			✓		
I would recommend this textbook			✓		
Average for Recommend Text :					

5

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written			X		
The text is informative	X				
The diagrams and pictures are helpful		X			
Sidebars are relevant and clear		X			
I would recommend this textbook			X		
Comments: Although the information is there, it is rather difficult to pick out the important parts for each section. Requires a few re-readings to really understand each section. Pictures are good & help understanding.					

Could use more highlighting of important details

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	X				
The text is informative		X			
The diagrams and pictures are helpful	X				
Sidebars are relevant and clear	X				
I would recommend this textbook	X				
Comments : High understandability, used simpler words in a way that assisted learning. Highlighted important stuff better than other textbooks. Would like this one better.					

6

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written			✓		
The text is informative	✓				
The diagrams and pictures are helpful			✓		
Sidebars are relevant and clear	✓				
I would recommend this textbook			✓		
Comments: Information is in-depth, but presented in a more complex and less engaging format than the other option. Diagrams are understandable but only after reading captions. Overall informative, and in-depth, but difficult to understand and stay engaged.					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative		✓			
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook		✓			
Comments: Text in general is very simple, but very informative and efficient. Pictures and diagrams have a style that is easy to understand. It would be nice if it went slightly more in depth.					

7

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear			✓		
I would recommend this textbook		✓			
Comments:					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative		✓			
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Comments :					

8

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Comments:					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Comments : not many "sidebars"					

Sabina Salzmann

9

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Comments: I like how they show live versions of the cell but table/show where everything is					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful			✓		
Sidebars are relevant and clear		✓			
I would recommend this textbook		✓			
Comments: The Photos are harder to understand					

10

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative		✓			
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook		✓			
Comments:					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear			✓		
I would recommend this textbook		✓			
Comments :					

11

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative		✓			
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear	✓				
I would recommend this textbook		✓			
Comments:					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative		✓			
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear	✓				
I would recommend this textbook		✓			
Comments :					

(12)

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		X			
The text is informative	X				
The diagrams and pictures are helpful		X			
Sidebars are relevant and clear			X		
I would recommend this textbook		X			
Comments:					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		X			
The text is informative	X				
The diagrams and pictures are helpful	X				
Sidebars are relevant and clear	X				
I would recommend this textbook	X				
Comments :					

(13)

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative		✓			
The diagrams and pictures are helpful			✓		
Sidebars are relevant and clear	✓				
I would recommend this textbook		✓			
Comments: Little hard to find words					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative		✓			
The diagrams and pictures are helpful		✓	✓		
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Comments : I like how it's written					

Jessica Xing P4

14

Students: Please look through the following Chapter about **Cells** in each book and rate them. Feel free to add any comments that you have in the space provided. Thank you for your feedback!

Biology Textbook Title: *National Geographic Biology* - Cells (Ch. 6)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	X				
The text is informative	X				
The diagrams and pictures are helpful	X				
Sidebars are relevant and clear		X			
I would recommend this textbook	X				
Comments: I personally really liked this textbook because it was clear and easy to understand. The diagrams were all relevant and personally, as a visual learner I thought they were really helpful. info is concise, very organized					

Biology Textbook Title: *Inspire Biology* - Cells (Ch. 7)					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	X				
The text is informative	X	4.5	~~X~~		
The diagrams and pictures are helpful		X	~~X~~		
Sidebars are relevant and clear	X	~~X~~			
I would recommend this textbook		X			
Comments : I thought that it was very informative and the diagrams were mostly great, but I did feel it was very wordy which can be overwhelming and harder to retain information. I wish there were more like microscopic pics of these descriptions b/c sometimes animated images are unclear. overall, pretty good.					

4.5

Survey 4

Biology Textbook Title: *National Geographic Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear			✓		
I would recommend this textbook	✓				
Average for Recommend Text: 4.4					

- Higher quality textbook but some while some images are very good (real life pics ? images from microscopes), others have a confusing correlation
- Much more information in this textbook pretty easy to read
- Not as many sidebars

Biology Textbook Title: *Inspire Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Average for Recommend Text : 4.6					

- Good diagrams & pictures
- Pretty easy to read ; not too much text / space is wasted
- Sidebars on bottom more relevant to both science & real world application than past textbooks
- Some of the chapters are a little long

Ben Park Period 4

16

Biology Textbook Title: *National Geographic Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful		✓			
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Average for Recommend Text: 4.6					

I like this text, but what is stopping this book from being better, is the pictures. Some of the pictures don't explain what is relevant with the text.

Biology Textbook Title: *Inspire Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
Average for Recommend Text : 4.8					

I like the real pictures and 3D diagrams. I feel that they are very clear with good labels, and they make the text more interesting. The more pictures & diagrams there are, the easier it is for me to read and understand.

Arman Najafian

17

Biology Textbook Title: *National Geographic Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written	✓				
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
4.8/5	**Average for Recommend Text:**				

Nice diagrams and descriptions on each page
easy to find key words and definitions

Biology Textbook Title: *Inspire Biology*					
	Strongly Agree 5	4	3	2	Strongly Disagree 1
The text is clearly written		✓			
The text is informative	✓				
The diagrams and pictures are helpful	✓				
Sidebars are relevant and clear		✓			
I would recommend this textbook	✓				
4.6/5	**Average for Recommend Text :**				

Shows nice diagrams regarding text
highlights key words
Sidebars are better