SUBMISSION TITLE: DISCOVERY EDUCATION SCIENCE TECHBOOK (FLORIDA)—GRADE 4
GRADE LEVEL: 4
COURSE TITLE: DISCOVERY EDUCATION SCIENCE TECHBOOK (FLORIDA)—GRADE 4
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AUTHORS & CREDENTIALS: LIST FULL NAME OF AUTHOR(S), WITH MAJOR OR SENIOR AUTHOR LISTED FIRST. BRIEFLY PROVIDE CREDENTIALS FOR EACH AUTHOR.

Amy Gensemer—Director of Science Instruction
Amy has 16 years of educational experience in Science, Technology, and Engineering as a high school classroom teacher, department chair, district curriculum specialist and most recently supervisor for Science, Technology, and Engineering for the largest school system in Maryland. Prior to her supervisor position, she designed and delivered Professional development at that national level and has authored national STEM curriculum products.

David Marsland - Content Specialist, K-12 Science
David has 38 years of experience in science education as a 6-12 classroom teacher, department chair, district science advisor, curriculum specialist, and teacher trainer. He taught both students and teachers in the United Kingdom and Africa before becoming a Curriculum Developer and later a Director of Science Teacher Professional Development at the Smithsonian Institution.

Nikki Snyder - Content Specialist, K-12 Science Instruction
Nikki has over 12 years of experience in science education as a middle school and high school science classroom teacher, district curriculum writer, and professional development trainer in the largest school system in Maryland. In addition, she worked at the American Association for the Advancement of Science on their after-school standards-based science program, Kinetic City: Mission to Vearth. She holds a master's degree in Chemical and Life Sciences.

STUDENTS: DESCRIBE THE TYPE(S) OF STUDENTS FOR WHICH THIS SUBMISSION IS INTENDED.

Discovery Education Science Techbook includes many features that make learning more accessible for all learners. The wide variety of resources, in multiple auditory and visual modalities, allows content to be accessible to various types of learners, and supports teaching and learning with student choice, a key Universal Design for Learning (UDL) principle. These multiple modalities also
ELL students to more easily access and obtain the instructional objectives. Discovery Education Science Techbook Readings are differentiated at two reading levels, and available in Spanish. Every concept in Discovery Education Science Techbook has opportunities for extension for accelerated students, or students who may need additional reinforcement of content. Model Lessons for teachers, available for every concept, include differentiation strategies for ELL, accelerated, and struggling students.

A key principle of the instructional philosophy behind Discovery Education Science Techbook is the opportunity for every student to build skills and engage with content as active students in the learning process, not passive bystanders.

1. LIST THE FLORIDA DISTRICTS IN WHICH THIS PROGRAM HAS BEEN PILOTED IN THE LAST EIGHTEEN MONTHS.

No districts have piloted this program in the last eighteen months.

2. HOW ARE YOUR DIGITAL MATERIALS SEARCHABLE BY FLORIDA STATE STANDARDS (SECTION 1006.33(1)(E), FLORIDA STATUTES)?

The “Standards” link at the top of the “Table of Content” page of each Techbook includes very detailed alignment documents, with hyperlinked examples of where Techbook aligns to specific standards. Additionally, the Model Lesson of each concept lists the standards included within the learning sequence of the concept.

3. IDENTIFY AND DESCRIBE THE COMPONENTS OF THE MAJOR TOOL. The Major Tool is comprised of the items necessary to meet the standards and requirements of the category for which it is designed and submitted. As part of this section, include a description of the educational approach of the submission.

Educational Approach: (The information provided here will be used in the instructional materials catalog in the case of adoption of the program. Please limit your response to 500 words or less.)

**Science Techbook is a breakthrough digital textbook.**
Designed to change the way students and teachers experience science, Science Techbook helps teachers transform instruction with a simple-to-use and highly interactive program. It integrates multimedia, including video, audio, text, and interactives, with hands-on activities and virtual labs. Embedded assessment opportunities are also provided. Science Techbook works on any device and in any instructional setting.

**Science Techbook makes differentiation easier.**
The Core Interactive Text feature blends text and media for students with different abilities and learning styles. Students can highlight, add sticky notes, and have the text read aloud. Reading levels can be modified and text can also be viewed in Spanish. Real-time data makes it easier to adjust instruction.

**Science Techbook puts students in control of their own learning.**
Board Builder promotes independent learning by challenging students to be content producers. With
Board Builder, students can create virtual project boards using multimedia and text to synthesize their thinking and provide evidence of their understanding of a concept or problem. Boards can be shared with teachers, classmates, parents, and even with classrooms across the United States and the world.

**Science Techbook strengthens critical thinking, problem solving, and analytical skills for all students.**
The 5E model (Engage, Explore, Explain, Elaborate, Evaluate) and inquiry-based format balance critical thinking and problem solving with disciplinary literacy and analytical writing, skills that students need as they progress through their science courses, general education, and beyond.

**Science Techbook contains an abundance of multimedia content and activities.**
Virtual labs, videos, photographs, and nearly 2,000 hands-on labs and activities engage students immediately, helps them understand the relevancy of science in their daily lives, and allows them the opportunity to apply the practices of scientists.

**Science Techbook is easy to use, anywhere, anytime.**
The streamlined design provides an easy-to-follow experience, accessible from any device, 24/7. Plus, a one-to-one classroom is not needed. Science Techbook can be used with any amount of technology—a classroom full of laptops, tablets, individual smart phones, or a single interactive white board.

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Major Tool - Student Components Describe each of the components, including a format description.

**Discovery Education Science Techbook** is a digital, Internet-based, interactive, multimodal, core instructional resource. Discovery Education Science Techbook does not require hardware installation. Discovery Education Science Techbook can be accessed on any device with Internet access. Discovery Education Science Techbook is purchased per student license.

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Major Tool - Teacher Components Describe each of the components, including a format description.

Teacher resources are included in the teacher view of Discovery Education Science Techbook (the major tool) and are not bid as a separate item. When an educator accesses Discovery Education Science Techbook, they have access to teacher only resources, including Model Lessons for each concept, lesson plans, hyperlinked standards alignment, ELL teaching tips, common misconceptions, pacing guidelines, background information, literacy connections, and more. Teachers also have access to the Discovery Education Network (DEN) to connect with other teachers around the world to share resources and best practices, participate in webinars, and network.

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**4. IDENTIFY AND DESCRIBE THE ANCILLARY MATERIALS.** Briefly describe the ancillary materials and their relationship to the major tool.

Ancillary Materials - Student Components Describe each of the components, including a format description.

The optional print ancillary, the Interactive Student Resource (ISR), provides students with printed versions of activities found in the major tool. ISR pages include QR codes to direct students to digital content. This is designed to provide more options for teachers, schools, and districts that are on different points in the digital transformation continuum.
Ancillary Materials - Teacher Components Describe each of the components, including a format description.

Teacher resources, including the Model Lesson for each concept, are included in the teacher view of the major tool and are not bid as a separate item. Certain professional development is provided to teachers at no-cost, either digitally in-product, or during face-to-face professional development allocated based on the number of licenses purchased (see #7).

5. IDENTIFY WHICH INDUSTRY STANDARD PROTOCOLS ARE UTILIZED FOR INTEROPERABILITY?

Discovery Education is a member of the Common Cartridge & Learning Tools Interoperability Alliance and is working to comply with IMS Global Standards with some of our partners.

6. HOW MUCH INSTRUCTIONAL TIME IS NEEDED FOR THE SUCCESSFUL IMPLEMENTATION OF THIS PROGRAM? Identify and explain the suggested instructional time for this submission. If a series, state the suggested time for each level. The goal is to determine whether the amount of content is suitable to the length of the course for which it is submitted.

Science Techbook courses are intended to be used for a full 180-day school year, at 50-60 minutes per day of instruction. The course can also be used in block-scheduled courses. There is additional content in the course to allow districts and teachers to choose areas for emphasis and depth. Pacing suggestions are included in the Model Lesson resource, viewable only in the teacher view.

7. WHAT PROFESSIONAL DEVELOPMENT IS AVAILABLE? Describe the ongoing learning opportunities available to teachers and other education personnel that will be delivered through their schools and districts as well as the training/in-service available directly from the publisher for successful implementation of the program. Also provide details of the type of training/in-service available and how it may be obtained. (The information provided here will be used in the instructional materials catalog in the case of adoption of the program.)

The amount of professional development is based on the number of student licenses purchased and is allocated as follows:

- Level 1, 1 to 750 student licenses, (1) One-hour Webinar
- Level 2, 751 to 1,500 student licenses, (2) On-Site Sessions
- Level 3, 1,501 to 6,000 student licenses, (3) On-Site Sessions
- Level 4, 6,001 to 12,000 student licenses, (19) On-Site Sessions
- Level 5, 12,000 or more student licenses, (37) On-Site Sessions

Districts have a wide variety of courses to choose for these professional development options, including professional development focused on an introduction of Discovery Education Science Techbook, Flipped Classrooms, Driving Student Achievement with Assessment and Intervention, Embedding Process Skills with Science Techbook, Powerful Strategies for Increasing Student Engagement, Station Based Inquiry, and Read, Write, and Think Like a Scientist.

8. WHAT HARDWARE/EQUIPMENT IS REQUIRED? List and describe the hardware/equipment needed to implement the submission in the classroom. REMEMBER: Florida law does not allow
hardware/equipment to be included on the bid! However, schools and districts must be made aware of the hardware/equipment needed to fully implement this program.

Discovery Education Science Techbook is a digital, Internet-based resource and does not require hardware installation. Discovery Education Science Techbook can be accessed on any device with Internet access.

9. WHAT LICENSING POLICIES AND/OR AGREEMENTS APPLY? If software is being submitted, please attach a copy of the company’s licensing policies and/or agreements.

Please see the attached Sample Agreement and Discovery Education’s Terms of Use.

10. WHAT STATES HAVE ADOPTED THE SUBMISSION? List some of the states in which this submission is currently adopted.

Discovery Education Science Techbook for this adoption process are custom-built for the state of Florida.

11. WHAT OPEN EDUCATIONAL RESOURCES RELATED TO THIS BID DO YOU MAKE AVAILABLE(S)? List and describe each of the components, including a format description. (Open Educational Resources (OER) are high-quality, openly licensed, online educational materials that offer an extraordinary opportunity for people everywhere to share, use, and reuse knowledge.)

Discovery Education Science Techbook is comprised of many different sources of information, including data, images, and video that are in the public domain and are OER.

12. ALTHOUGH NOT CALLED FOR IN THE STATE ADOPTION, DO YOU HAVE ADVANCED PLACEMENT (AP) OR ACCELERATED PROGRAM INSTRUCTIONAL MATERIALS AVAILABLE FOR THE COURSE(S) BID FOR ADOPTION?

Discovery Education Science Techbook is not available for AP courses. Discovery Education Science Techbook courses do include extension resources to help differentiate and personalize instruction for students.

13. WHAT, IF ANY, FOREIGN LANGUAGE TRANSLATIONS DO YOU HAVE AVAILABLE?

Discovery Education Science Techbook includes Spanish translation of reading passages, with the Spanish “Speak Text” tool available, as well as an interactive glossary with Spanish translation.

Prepared by: ____________________________

Joe Sangillo, State Adoptions Manager