Superintendent File: IJ-E2

NOVEL/BOOK-LENGTH WORK PROPOSAL (Fiction, Non-Fiction, Drama)

Proposal Request Information

Prior to filling out this form, please read the <u>Novel Adoption Proposal Checklist</u> (scroll down to novel section) with pertinent policies regarding novel selection and adoption.

FOR DISTRICT USE ONLY FINAL COMMITTEE RECOMMENDED APPROVAL GRADE LEVELS:	9th and up
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Section I

To be filled out by Requesting Educator:

Ia. REQUESTOR AND REVIEW TEAM INFORMATION

School	PHS			
Date	8/28/24			
Requesting Educator Name	Rebecca Roberts			
Requesting Educator Email	rroberts@dcsdk12.org			
Novel Adoption School Process Manager Name	Kathleen Gould/Melissa Nan	sen		
Novel Adoption School Process Manager Email	kgould@dcsdk12.org, mlnansen@dcsdk12.org			
Proposal Review Team Member	Reviewer's Name	Contact Information - email		
District Coordinator	Elyse Rhodes	evrhodes@dcsdk12.org		
Colleague	Pamela Waid pwaid@dcsdk12.org			
Parent #1	Jenny Lynch	jennylynch03@gmail.com		
Parent #2	Lisa Bosco	lbosco@dcsdk12.org		

Ib. BOOK INFORMATION

Title of proposed book	Lab Girl
Author(s)	Hope Jahren
Publisher	Knopf-Doubleday
Edition	1st edition

ISBN number	9781101874936 (ISBN10: 1101874937)
Copyright date	2016
Course and/or subject area in which work will be used	Biology and Honors Biology
Grade level(s)	9-12 mainly 10th
Lexile Level Score (If you are unsure, please visit: https://hub.lexile.com/find-a-book/search)	L: 1240
Dates the book information was displayed at the school and posted on the school's website (2 week min.).	9/9/2024
Date the book was communicated to the School Accountability Committee?	9/17/2024 - Ryan Hollingshead

Ic. NOVEL DESCRIPTION

Lab Girl is Hope Jahren's memoir, tracing her trajectory from a curious child in her father's lab to her career as a successful science researcher, wife, and mother. Jahren grew up in a small town in southern Minnesota, where she would spend her evenings playing in her father's science laboratory at the local community college. Even at such a young age, Jahren viewed the lab as a sanctuary, and felt more comfortable there than she did in her own home.

Jahren admits that she felt like she needed to complete her mother's unfinished business, so she attended the University of Minnesota, majoring in science. She worked hard in college, taking classes and studying during the day, and working at the university hospital all night. [Encouraged] by her professors, Jahren decided to attend graduate school, and immediately after her graduation from the University of Minnesota, Jahren donated her winter clothing and got on a plane to California, where she began a doctoral program in soil science at the University of California, Berkeley.

Id. ALIGNMENT WITH DCSD'S CURRICULUM

Superintendent File: IJ-E2

Please write a detailed description of how the novel <u>aligns to DCSD's Curriculum</u> - Colorado Academic Standards (CAS) and Essential Skills:

(Please cite the specific CAS Grade Level Expectations and if applicable, the Evidence Outcomes (EOs) the novel will help address).

This novel will support the Biology curriculum and our goal around science literacy. This memoir specifically talks about photosynthesis and any real-world connection we can make to content always strengthens student outcomes and literacy learning. Additionally, students will be able to connect to the protagonist or other characters and see themselves pursuing scientific research as adults. College and career readiness skills and challenges of female researchers are addressed giving context to students for future planning. This novel will support our study of photosynthesis directly by covering the following standards:

- Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy. (HS-LS1-5) (Clarification Statement: Emphasis is on illustrating inputs and outputs of matter and the transfer and transformation of energy in photosynthesis by plants and other photosynthesizing organisms. Examples of models could include diagrams, chemical equations, and conceptual models.) (Boundary Statement: Does not include specific biochemical steps.)
- 2. Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules. (HS-LS1-6) (Clarification Statement: Emphasis is on using evidence from models and simulations to support explanations.) (Boundary Statement: Does not include the details of the specific chemical reactions or identification of macromolecules.)
- 3. Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere. (HS-LS2-5) (Clarification Statement: Examples of models could include simulations and mathematical models.)
- 4. Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. (HS-LS2-7) (Clarification Statement: Examples of human activities can include urbanization, building dams, and dissemination of invasive species.)

Ie. RECOMMENDATIONS

Three recommendations, referrals or reviews must be included. Please use <u>professional</u> reviews (reviews from the School Library Journal, Kirkus, Booklist, Publisher's Weekly, etc.). The District Library Media Center will be happy to direct you to these sources. List the sources of the reviews below and attach copies of all reviews.

Review #1

From Kirkus: https://www.kirkusreviews.com/book-reviews/hope-jahren/lab-girl/

Award-winning scientist Jahren (Geology and Geophysics/Univ. of Hawaii) delivers a

personal memoir and a paean to the natural world.

The author's father was a physics and earth science teacher who encouraged her play in the laboratory, and her mother was a student of English literature who nurtured her love of reading. Both of these early influences engrossingly combine in this adroit story of a dedication to science. Jahren's journey from struggling student to struggling scientist has the narrative tension of a novel and characters she imbues with real depth. The heroes in this tale are the plants that the author studies, and throughout, she employs her facility with words to engage her readers. We learn much along the way—e.g., how the willow tree clones itself, the courage of a seed's first root, the symbiotic relationship between trees and fungi, and the airborne signals used by trees in their ongoing war against insects. Trees are of key interest to Jahren, and at times she waxes poetic: "Each beginning is the end of a waiting. We are each given exactly one chance to be. Each of us is both impossible and inevitable. Every replete tree was first a seed that waited." The author draws many parallels between her subjects and herself. This is her story, after all, and we are engaged beyond expectation as she relates her struggle in building and running laboratory after laboratory at the universities that have employed her. Present throughout is her lab partner, a disaffected genius named Bill, whom she recruited when she was a graduate student at Berkeley and with whom she's worked ever since. The author's tenacity, hope, and gratitude are all evident as she and Bill chase the sweetness of discovery in the face of the harsh economic realities of the research scientist.

Jahren transcends both memoir and science writing in this literary fusion of both genres.

Review #2

From Booklist: https://www.booklistonline.com/Lab-Girl-Hope-Jahren/pid=7796199

While growing up in a cold place with an undemonstrative mother, Jahren found warmth and happiness in her father's laboratory at a Minnesota community college, thus setting the course for her own groundbreaking scientific quest. An award-winning geochemist and geobiologist with a love of language, self-deprecating humor, and valiant candor, Jahren presents an exceptionally compelling and enlightening memoir. Gracefully meshing her struggles as a woman scientist with the marvels of plants, she aligns the risks a sprouting seed takes in an inhospitable world with her entry into the sexist realm of science, and symbiotic plant-pollinator relationships with her crucial collaboration with Bill, a heroically steadfast and self-sacrificing partner in mischief, hard work, and discovery. Jahren recounts their hilariously barbed repartee and crazy, dangerous adventures transforming decrepit spaces into gleaming, humming labs and undertaking daunting field work. Jahren reveals her bouts with bipolar disorder and discloses the intense creativity and effort required for "curiosity-driven" science, from designing experiments to the infinite patience and dexterity required for lab work to the grueling battle for funding in a system that values products over knowledge. Finally, she matches her findings about how plants thrive and maintain life on Earth with grave concern over our reckless destruction of forests. A botanical variation on Helen Macdonald's best-selling H Is for Hawk (2015), Jahren's forthright, beautifully expressed, and galvanizing chronicle deserves the widest possible readership.

HIGH-DEMAND BACKSTORY: Jahren's dramatic, funny, eye-opening memoir is generating elevated interest backed by a major national promotional campaign, including author appearances.

— Donna Seaman

Review #3

Library Journal (February 15, 2016)

Jahren's first book is a refreshing mix of memoir about her journey as a woman scientist and musings about plants, the central focus of her successful scientific endeavors. What's most refreshing is the author's openness about her relationship and collaboration with research partner Bill. Over the course of 20 years their field treks take them to the North Pole, the back roads of Florida, and Ireland's countryside. Meanwhile they build three labs, including their current one at the University of Hawaii. At times funny and at other points poignant, this work expresses Jahren's passion for paleobiology-her subdiscipline within environmental geology-through her insights into plant life and growth. She skillfully ties this knowledge to her own life stories and successfully conveys the dedication required to build and sustain a research agenda and the requisite lab at any major U.S. research institution. VERDICT This title should be required reading for all budding scientists, especially young women. However, being a scientist is not essential in order to savor Jahren's stories and reflections on living as well as fossil plant life. [See Prepub Alert, 10/26/15.]-Faye Chadwell, Oregon State Univ., Corvallis © Copyright 2016. Library Journals LLC, a wholly owned subsidiary of Media Source, Inc. No redistribution permitted.

SECTION II: Review Team Information

Each review team member will complete an individual section for a formal review of the book based on your stakeholder perspective. All members of the site review team <u>MUST read</u> the proposed novel/book prior to submission to the Curriculum, Instruction and Assessment <u>Director.</u>

IIa. EVALUATION of Book (to be completed by requesting educator) Rebecca Roberts

The proposed novel	Y/N	Examples/Justification Please be specific and give examples when applicable
Is appropriate for the following grade level(s)	Y	The Lexile level seems to fall squarely in the appropriate range for High School Biology students. The content is appropriate for this grade level as well.
Requires parent permission for students to read the book?	N	No parental permission is required
Allows students to create meaning and make relevant connections to other knowledge and experience	Y	Students may be able to make connections to the main characters in a multitude of ways. This may be through her gender, her being a scientist, her mental health struggles or even how Bill is homeless.
Actively engages students through the text	Y	This book has an audiobook version for students who may need it. Students who are interested in science will likely find it engaging.
Gives an opportunity for all students to access	Y	The book is written in an engaging way and should be accessible for Biology students
Is it in alignment with Board File ADB on Education Equity, AND contributes to an inclusive culture for all students?	Y	Yes, the content of this book includes some topics like homelessness, mental illness and financial insecurity.
Recommend novel for adoption		<mark>☑ Yes</mark> □ No

IIb. EVALUATION of Book (to be completed by District Coordinator) Elyse Rhodes

The proposed novel	Y/N	Examples/Justification Please be specific and give examples when applicable
Is appropriate for the following grade level(s)	Υ	The memoir is appropriate for grades 9-12 advanced science classes, however, it may be difficult for 9 and 10th graders to comprehend.
Requires parent permission for students to read the book?	N	No parent permission required.
Allows students to create meaning and make relevant connections to other knowledge and experience	Υ	Students may connect to the author's struggles with mental illness, her otherness within the science community, and her familial relationships. Students may connect to Bill's homelessness.
Actively engages students through the text	Y/N	The author's style of writing is engaging and interesting especially when listening to the audiobook which is read by the author. The subject may be engaging to students who are interested in science as a career, particularly females interested in science. The book may not be engaging to students who do not like studying science and will be difficult for students who are not proficient in English and/or not reading at grade level.
Gives an opportunity for all students to access	Y	This novel is available in hardcopy, eBook, audiobook (read by the author), large print, and in Korean.
Is it in alignment with Board File ADB on Education Equity, AND contributes to an inclusive culture for all students?	Y	This memoir includes the difficulties of being a woman in a male dominated academic field, living with bipolar disorder, and homelessness.
Recommend novel for adopti	on	✓ Yes □ No

IIc. EVALUATION of Book (to be completed by a colleague) Pam Waid

The proposed novel	Y/N	Examples/Justification Please be specific and give examples when applicable
Is appropriate for the following grade level(s)	Y	10-12
Requires parent permission for students to read the book?	N	No parent permission required
Allows students to create meaning and make relevant connections to other knowledge and experience	Y	Students learn about and are given the opportunity to connect to many different areas including the field of science (specifically botany), science research (including the politics/process behind funding), mental illness, homelessness, relationships (and challenges of relationships), exposure to different areas of the country and beyond.
Actively engages students through the text	Y	This text will engage students who are open and interested in science, research careers, gender disparity, opportunities for individuals who are struggling with mental illness and financial challenges (poverty).
Gives an opportunity for all students to access	Y	This novel is available in hardcopy, eBook, audiobook (read by the author), large print, and in Korean.
Is it in alignment with Board File ADB on Education Equity, AND contributes to an inclusive culture for all students?	Y	This novel includes the perspectives of mental illness, gender inequality, financial struggles and homelessness.
Recommend novel for adopti	on	<mark>☑ Yes</mark> □ No

Ild. EVALUATION of Book (to be completed by Parent #1) Jenny Lynch

The proposed novel	Y/N	Examples/Justification Please be specific and give examples when applicable
Is appropriate for the following grade level(s)	9-12	Appropriate grade levels include 9th through 12th (plenty of scientific jargon and complicated, adult themes intertwined with the scientific research around plants and especially trees).
Requires parent permission for students to read the book?	N	I do not believe this is needed. However, we know what kind of society we are living in, so being transparent about major themes (loss, sexism, motherhood, mental illness, family we choose, etc.) and potential triggers could be helpful.
Allows students to create meaning and make relevant connections to other knowledge and experience	Y	Justification: I believe the teacher's and department's intentions are justified in seeking to add this piece of literature to their curriculum as it will tie nicely and seamlessly to biology. While I admit at times, the scientific language and terms can be daunting and dense, the way that Jahren weaves her personal story of being a woman in a man's field and the particular experiences that befall her speak to the greater human condition. For example, Jahren takes odd jobs throughout her early career to afford essential needs. Once she decides science is her preferred path of study, she begins from scratch. Noting the limited funds available for scientists, especially ones in her particular field of study, she navigates through the process of building labs, teaching students, making friendships with a societal outcast, and eventually motherhood. She marks her obstacles, Early on, she has to build her accreditation, which seems far fetched until decades later. Only one mentor believes in her as she moves across the country to take his equipment to start her second lab in Baltimore. Later while pregnant, she faces a man, her boss, who sends her partner (a male) to tell her she is a liability by being on campus. She battles mental illness through it all. She battles loss with a friend, marriage, living abroad and more in no particular order. She curses and speaks her mind without apology which is deeply refreshing as

		she clearly wrote this for herself as if documenting her life as her own experiment.
Actively engages students through the text	Y	She is a colorful, honest character who has many challenges and flaws as all humans do. Her stories woven with the science behind trees helps engage students. There will be moments where the teachers will need to think about how to make some of the terminology accessible to all levels of students.
Gives an opportunity for all students to access	Y	Again, the promotion that science is a possible field of study for all people comes through clearly. Making purposeful guides or ways to help students grasp challenging concepts or terms can be supported within the science classroom. Being able to support a variety of modes for students to access the text is also widely available. Audible options are also available.
Recommend novel for adoption		<mark>✓ Yes</mark> □ No

Ile. EVALUATION of Book (to be completed by Parent #2) Lisa Bosco

The proposed novel	Y/N	Examples/Justification Please be specific and give examples when applicable
Is appropriate for the following grade level(s)	Y	10-12
Requires parent permission for students to read the book?	N	
Allows students to create meaning and make relevant connections to other knowledge and experience	Y	Engaging and Accessible Science: Lab Girl introduces students to the world of botany, geology, and environmental science in a captivating and accessible way. Jahren's narrative blends her personal story with scientific explanations, making complex topics understandable and relatable for high school students. The book fosters an appreciation for science and could inspire students to explore STEM careers, particularly in the fields of biology and environmental studies. Themes of Perseverance and Resilience: Jahren's journey from a curious child to a successful scientist highlights important themes of resilience, determination, and overcoming challenges. These lessons are essential for young adults, especially as they face academic and personal hurdles. Jahren's candid portrayal of her struggles with mental health also opens up valuable discussions around mental well-being, reducing stigma, and seeking support. Interdisciplinary Appeal: While the book is rooted in science, it appeals to a wide audience with its combination of memoir, environmental advocacy, and introspective storytelling. This makes it suitable for students interested not only in science but also in literature, personal development, and global environmental issues. It could serve as a resource across various subjects, including science, literature,
Actively engages students through the text	Y	Promotes Critical Thinking and Environmental Awareness: The book raises awareness about environmental issues, including the importance of plant life and ecosystems. As environmental concerns grow increasingly important for younger generations, Lab Girl provides students with the context to think critically about humanity's

		relationship with nature and the impact of scientific exploration on the world.
Gives an opportunity for all students to access	Υ	Empowering Female Representation in STEM: In a field often dominated by men, Jahren's success story as a female scientist provides an empowering role model for young women interested in science. Including <i>Lab Girl</i> in the library will contribute to creating a more inclusive atmosphere that encourages diversity in STEM subjects.
Recommend novel for adoption		<mark>☑ Yes</mark> □ No

SECTION III: Requestor/Educator & District Coordinator Level Process Review

Illa. Grade Level Recommendations (to be collaborated on between Requesting Educator & District Coordinator based on recommendations made by the review team).

Place initials in the columns indicating level of recommendation. Complete by initialing for every grade level indicated on the chart below. Please include justification if necessary for the level(s) of recommendation below the chart.

Note: If approved by the Board of Education, this novel can be used by all educators in DCSD. Please consider the use of this book for all PK-12 grades, not just the grade or content you teach.

Grade level	Recommended	Recommended: Requires parent notification and consent - The novel/book may contain some mature content and themes	Not Recommended: Content inappropriate for grade level(s)
PK/K			ER RR
1			ER RR
2			ER RR
3			ER RR
4			ER RR
5			ER RR
6			ER RR
7			ER RR
8			ER RR
9		ER RR	
10		ER RR	
11		ER RR	
12		ER RR	

SECTION V: Signatures/Approvals

Va.		
Does the evaluating <i>Educator</i> recommend adoption of this book?	YES	NO
Date Oct 09 2024		
Evaluating Educator Signature Rebecca Roberts		
Vb.		
Does the evaluating <i>Colleague</i> recommend adoption of this book?	YES	NO
Date Oct 09 2024 Evaluating Colleague Signature Pamela Waid		
Vc. Does the evaluating <i>Parent #1</i> recommend adoption of this book?	YES	NO
Date Oct 09 2024 Evaluating Parent (#1) Signature Fenny Kynch		
Vd.		
Does the evaluating <i>Parent (#2)</i> recommend adoption of this book?	YES	NO
Date Oct 09 2024 Evaluating Parent (#2) Signature Lisa Bosco	▼	

Does the evaluating educator's <i>Administrator</i> recommend adoption of this book?	YES	NO
Date Oct 10 2024 Administrator Signature Kristen E. Hogan	▽	
Vf.		
Does the <i>District Coordinator</i> certify that the information on this form accurately reflects the process followed at the site.	YES	NO
Date Oct 10 2024 District Coordinator Signature Elyse Rhodes	▽	
Vg.		
Does the <i>Director of Library Programming</i> support adoption of this book?	YES	NO
Date Oct 10 2024 Director of Library Programming Signature Tracie King	✓	
Vh.		
Does the <i>DCSD Cabinet Member</i> support adoption of this book?	YES	NO
Date Oct 10 2024 DCSD Cabinet Member Signature Matt Reynolds	\triangleright	

SECTION VI: Superintendent's Approval

SUPERINTENDENT'S APPROVAL

Does the Superintendent approve adoption of this book?	YES	NO
Date		
Superintendent Signature		

SECTION VII: Board of Education Approval

BOARD OF EDUCATION APPROVAL

Does the Board of Education approve adoption of this book?	YES	NO
Date Board of Education Signature		

OFFICE USE

	DATE	INITIALS
Approved novel list updated (including recommended grade level)		
Approved form with BOE signatures scanned to CIA folder on District server		