Faculty Review of Open eTextbooks

The California Open Educational Resources Council has designed and implemented a faculty review process of the free and open etextbooks showcased within the California Open Online Library for Education (www.cool4ed.org). Faculty from the California Community Colleges, the California State University, and the University of California were invited to review the selected free and open etextbooks using a rubric. Faculty received a stipend for their efforts and funding was provided by the State of California, the William and Flora Hewlett Foundation, and the Bill and Melinda Gates Foundation.

Textbook Name:

Structure and Interpretation of Computer Programs
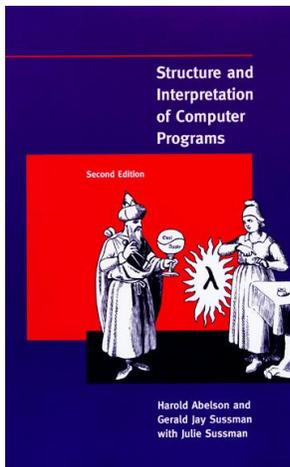
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Format Reviewed:
Online
A small fee may be associated with various formats.
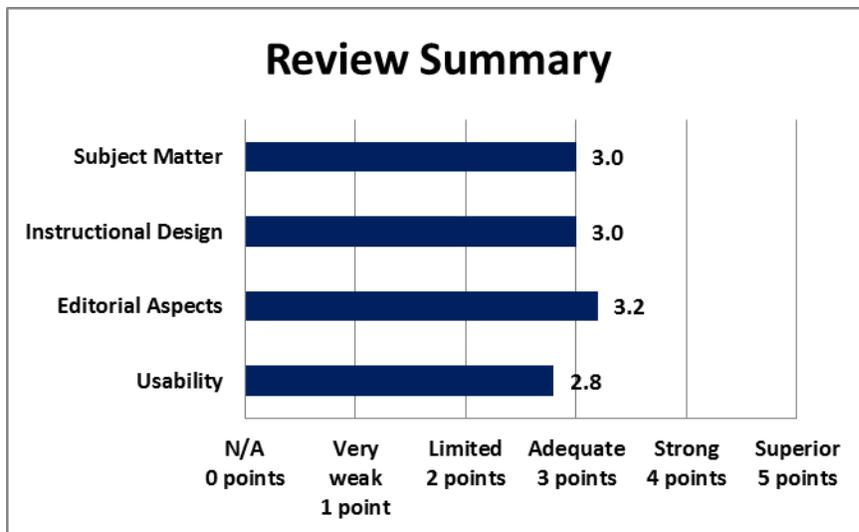
Date Reviewed:
March 2015

Review Summary

Category	Score
Subject Matter	3.0
Instructional Design	3.0
Editorial Aspects	3.2
Usability	2.8

N/A 0 points	Very weak 1 point	Limited 2 points	Adequate 3 points	Strong 4 points	Superior 5 points

California OER Council eTextbook Evaluation Rubric
CA Course ID: COMP 122

Subject Matter (30 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the content accurate, error-free, and unbiased?					X	
Does the text adequately cover the designated course with a sufficient degree of depth and scope?				X		
Does the textbook use sufficient and relevant examples to present its subject matter?				X		
Does the textbook use a clear, consistent terminology to present its subject matter?					X	
Does the textbook reflect current knowledge of the subject matter?					X	
Does the textbook present its subject matter in a culturally sensitive manner? (e.g. Is the textbook free of offensive and insensitive examples? Does it include examples that are inclusive of a variety of races, ethnicities, and backgrounds?)	X					

Total Points: 18 out of 30

Please provide comments on any aspect of the subject matter of this textbook:
- This book is a classic in the field of introductory computer science and programming. However, it uses a language, Scheme, that is rarely taught these days.
- The book's approach is fast-paced, rigorous, and unforgiving to the student whose interest in programming would be whetted by examples outside of computer science.
- A fine book for a CS grad student to be familiar with; completely inappropriate for 95% of freshmen in COMP122.
- The book is very text-oriented with just a sprinkling of diagrams. Interesting exercises are presented throughout, but are usually challenging thought problems and not of the "practice what you just learned" variety.

Instructional Design (35 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Does the textbook present its subject materials at appropriate reading levels for undergrad use?				X		
Does the textbook reflect a consideration of different learning styles? (e.g. visual, textual?)				X		
Does the textbook present explicit learning outcomes aligned with the course and curriculum?				X		
Is a coherent organization of the textbook evident to the reader/student?					X	
Does the textbook reflect best practices in the instruction of the designated course?				X		
Does the textbook contain sufficient effective ancillary materials? (e.g. test banks, individual and/or group activities or exercises, pedagogical apparatus, etc.)			X			
Is the textbook searchable?				X		

Total Points: 21 out of 35

Please provide comments on any aspect of the instructional design of this textbook:
- The instructional design of this book is to directly expose the structures of a programming language (Scheme). The authors seem to assume that the student will learn the skill of programming "along the way" and this is not a topic of the book.

Editorial Aspects (25 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the language of the textbook free of grammatical, spelling, usage, and typographical errors?					X	
Is the textbook written in a clear, engaging style?					X	
Does the textbook adhere to effective principles of design? (e.g. are pages latid0out and organized to be clear and visually engaging and effective? Are colors, font, and typography consistent and unified?)				X		

	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Does the textbook include conventional editorial features? (e.g. a table of contents, glossary, citations and further references)				X		
How effective are multimedia elements of the textbook? (e.g. graphics, animations, audio)			X			

Total Points: 16 out of 25

Please provide comments on any editorial aspect of this textbook.

- The book's strength is not in layout and visual design, although these are adequate.

Usability (25 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
Is the textbook compatible with standard and commonly available hardware/software in college/university campus student computer labs?				X		
Is the textbook accessible in a variety of different electronic formats? (e.g. .txt, .pdf, .epub, etc.)				X		
Can the textbook be printed easily?				X		
Does the user interface implicitly inform the reader how to interact with and navigate the textbook?				X		
How easily can the textbook be annotated by students and instructors?			X			

Total Points: 14 out of 25

Please provide comments on any aspect of access concerning this textbook.

Overall Ratings						
	Not at all (0 pts)	Very Weak (1 pt)	Limited (2 pts)	Adequate (3 pts)	Strong (4 pts)	Superior (5 pts)
What is your overall impression of the textbook?			X			
	Not at all (0 pts)	Strong reservations (1 pt)	Limited willingness (2 pts)	Willing (3 pts)	Strongly willing (4 pts)	Enthusiastically willing (5 pts)
How willing would you be to adopt this book?		X				

Total Points: 3 out of 10

Overall Comments

If you were to recommend this textbook to colleagues, what merits of the textbook would you highlight?

- This is a great and classic textbook, and was no doubt a marvelous book for MIT students over a decade ago. For the vast majority of beginning CS students in 2015+, it is too abstract and dense. This is not a textbook that helps the student learn to program, it is a book that is concerned with the structure and interpretation of computer programs.

What areas of this textbook require improvement in order for it to be used in your courses?

- I wouldn't change a word; but I would only use it with advanced undergrads and grad students who wanted to revisit the fundamentals of programming languages.

We invite you to add your feedback on the textbook or the review to the textbook site in MERLOT
(Please register in MERLOT to post your feedback.)

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For questions or more information, contact the CA Open Educational Resources Council.