

## **Faculty Review of Open eTextbooks**

The <u>California Open Educational Resources Council</u> has designed and implemented a faculty review process of the free and open etextbooks showcased within the California Open Online Library for Education (<u>www.cool4ed.org</u>). Faculty from the California Community Colleges, the California State University, and the University of California were invited to review the selected free and open etextboks 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: Introductory Statistics



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Find it: eTextbook Website

Textbook Authors: Barbara Illowsky and Susan Dean



Date Reviewed:

December 2015

## **California OER Council eTextbook Evaluation Rubric**

CA Course ID: MATH 110

Subject Matter (30 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
b the content accurate, error-free, and unbiased?					Х	
Does the text adequately cover the designated course				v		
with a sufficient degree of depth and scope?				^		

Does the textbook use sufficient and relevant examples to present its subject matter?			х	
Does the textbook use a clear, consistent terminology to present its subject matter?			x	
Does the textbook reflect current knowledge of the subject matter?		х		
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: 21 out of 30

Please provide comments on any aspect of the subject matter of this textbook:

- I want to like this textbook, but there are several odd choices made in topics that are covered and how they are covered. For example, in the chapter on Discrete Probability distributions, almost no attempt is made to give students any kind of intuitive understanding of the distributions, and all calculations are made using specialized TI- calculator functions. There is no attempt to connect any understanding to histograms (from previous chapters) or continuous distributions in the following chapter, which is very problematic.
- As a second example, the chapter introducing hypothesis testing is written in a very odd way. After
  discussing the null hypothesis and alternative hypothesis in terms of quantitative variables, including that
  the null hypothesis always contains a statement of equality, the authors then go on to give several
  examples using qualitative variables. If I were teaching from this textbook, I would have to come up with
  completely different examples.

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?)			х			
Does the textbook present explicit learning outcomes aligned with the course and curriculum?						х
Is a coherent organization of the textbook evident to the reader/student?					х	
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?						Х

Total Points: 25 out of 35

Please provide comments on any aspect of the instructional design of this textbook:

- Overall, the text is easy to read. There are a number of collaborative learning exercises, which I
  appreciate, but most of them boil down to collecting data from classmates and are otherwise not very
  interactive or collaborative. The "try it" exercises are good in theory, but they are usually cut-and-paste
  problems that are exactly like the preceding example and offer no additional insight.
- In general, though, the text focuses too much on calculator exercises and not enough on either understanding of the concepts nor on large data projects that can help students to gain understanding.

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

Does the textbook include conventional editorial			v	
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)		х		

Total Points: 17 out of 25

Please provide comments on any editorial aspect of this textbook:

• Overall, the textbook is well produced and very easy to read. There are two main exceptions to this: First, for some reason, the x-bar symbol for the sample mean is typeset poorly, with the bar too small and too high up to be noticed easily. Second, many of the graphs are poorly labeled or are out of proportion, making them difficult to use.

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?					х	
Is the textbook accessible in a variety of different electronic formats? (e.gtxt, .pdf, .epub, etc.)					х	
Can the textbook be printed easily?					Х	
Does the user interface implicitly inform the reader how to interact with and navigate the textbook?					х	
How easily can the textbook be annotated by students and instructors?				х		
Total Points: 19 out of 25						

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

• The text is available as a .pdf file or on online edition. Both are easy to navigate using the table of contents. Annotation of the .pdf file is only possible using standard tools in Adobe Reader or other .pdf reading software.

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

Total Points: 4 out of 10

## **Overall Comments**

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

- Free, open access.
- Plenty of calculator exercise.

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

- It is hard to see how any reader would gain conceptual understanding of statistics.
- There is not enough large data set exercises or practice in interpreting statistics.

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





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