



Faculty Review of Open eTextbooks

The [California Open Educational Resources Council](http://www.cool4ed.org) 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 no/low cost 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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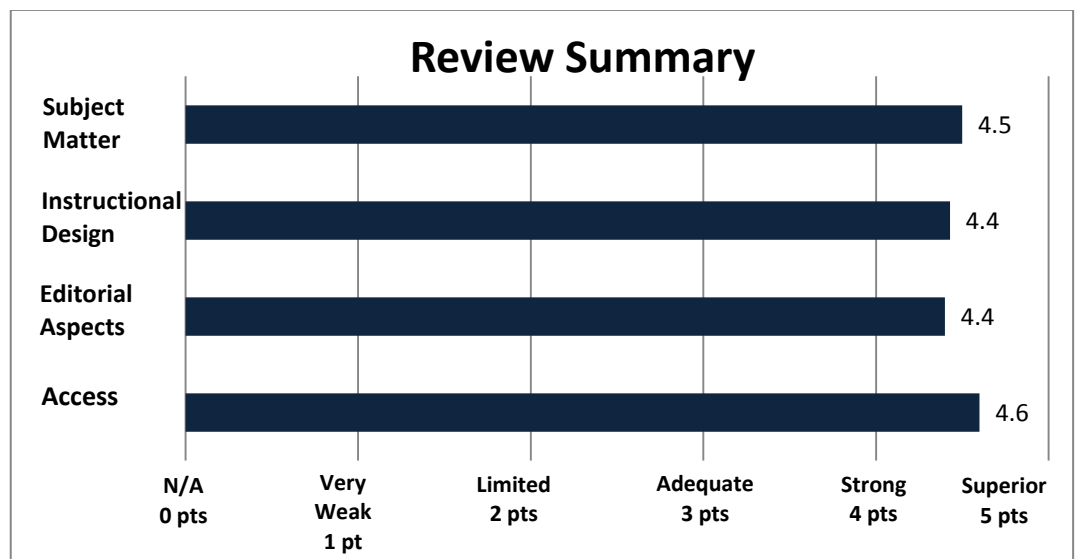
Format Reviewed:

[PDF](#)

A small fee may be associated with various formats.

Date Reviewed:

August, 2014



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)
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,					X	

Subject Matter (30 possible points)	N/A (0 pts)	Very Weak (1pt)	Limited (2 pts)	Adequate (3pts)	Strong (4 pts)	Superior (5 pts)
ethnicities, and backgrounds?)						

Total Points: 27 out of 30

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

One of the problems statistics students often face is uncertainty about the meaning of statistical terms and their clarification through the use of real-world examples. This textbook does a superb job of eliminating this uncertainty through such sections as key terms and terminology. Additionally, the topics and their associated exercises are organized logically and intuitively. The text stands out in that it includes certain critical sections not found in other texts. One example is the use of Cohen's d to measure the effect size in hypothesis testing. Sometimes it is necessary to know how significant the result is, not just whether the result is significant. Another example is the thorough discussion of conditional probability, a topic often conveyed as an afterthought in some texts. The text will benefit from including a section that shows the connection between descriptive and inferential statistics and the central role that probability plays in making this connection.

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: 31 out of 35 points

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

The design feels natural and intuitive. The placement of Examples, Try It, Collaborative Exercises, Use of Calculators, and Practice, Homework, and Bringing It Together, and Statistics Labs, make the textbook a holistic experience for students and instructor. The emphasis is on active learning that gives students the opportunity to take responsibility for their own learning. The extensive use of tables, graphs and charts, and more importantly, what they mean, is an invaluable aspect of the textbook. The occasional poem brings humor, an often overlooked aspect of a successful statistics textbook.

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 laid out and organized to be clear and visually engaging and effective? Are colors, font, and typography consistent and unified?)					X	
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: 22 out of 25

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

The editorial board has done an excellent job of ensuring that the textbook layout conforms to the best principles of editing. The TOC, Glossary, Appendix and Index are all laid out in a clear and consistent style. The headings and

sub-headings of each chapter are organized logically, although an occasional error does creep in. One is on page 531 of the pdf version of the text. In the calculator icon section, the sign for the alternative hypothesis is indicated as "not equal to" while the claim suggests that it should be "less than."

Access (30 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: 23 out of 30

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

The availability of the textbook in several formats, including WeBAssign Online Homework System and Video Lectures, means that students have all the resources they need at their fingertips to acquire a deep working knowledge of statistics. Perhaps a mobile App for the text will be developed in the future to make the access even more universal and easier. Printing the pdf version of the textbook is easy, although at more than 800 pages, the cost may still be significant for some students. However, using the online version should mitigate such concerns.

Overall Ratings (10 possible points)	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

Overall Comments

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

- Emphasis on application of statistics rather than theory behind it
- Relevant real-world problems
- Collaborative exercises
- Real-time testing of knowledge gained
- Promotes active learning
- Promotes holistic learning

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

- Maintaining a section on the online version where more current real-world problems from medicine, technology, biology, physics, chemistry, English, history and other fields can be added dynamically. For example, an application of the "Margin of Error" concept as applied to a national poll will make the topic come alive for students. They can then apply the idea to school and college-level elections.

We invite your feedback on the textbook or the review to the [textbook site in MERLOT](#).
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