2017-2018 WCSD AP Statistics Program Evaluation Rubric

Evaluator Number

7

Program Number

2

Name of Text

Stats Modeling the World 4e

Publisher

Pearson

Rate This Text Overall

- [x] **High**
- [ ] **Mid**
- [ ] **Low**

Focus: Evaluate the table of contents and any pacing guides. Do not stop there; also evaluate units, chapters, and lessons. (Both student and teacher materials)

Exploring Data

Defining variables
Constructing and interpreting graphical displays of distributions of univariate data (dotplot, stemplot, histogram, cumulative frequency plot)!Summarizing distributions of univariate data Comparing distribution of univariate data (dotplots, back-to-back stemplots, parallel boxplots) Exploring bivariate data
Exploring categorical data

Sampling and Experimentation: Planning and conducting a study

Overview of methods of data collection
Planning and conducting surveys
Planning and conducting experiments
Generalizability of results and types of conclusions that can be drawn from observational studies, experiments and surveys
Simulation modeling

Anticipating Patterns: Exploring random phenomena using probability and simulation

Probability
Random variables
Binomial distributions/geometric
Normal distribution
Sampling distributions

Statistical inference: Estimating population parameters and testing hypotheses

Estimation
Confidence intervals
Hypothesis tests including chi-square and regression slope

At least 90% of the topics are in the textbook.
Comments?

Text covers all needed topics. I feel that the text could do a better job of showing work and examples but overall it is a good book.

Extra chapters are available on CD.

- ○ Less than 25%
- ○ Less than 60% but greater than 25%
- ○ Less than 90% but greater than 60%
- ◉ At least 90%

Student work involves significant work with applications/modeling and problems that use algebra skills
Comments?

It sure does.

- ○ Does not occur
- ○ Sometimes occurs
- ○ Frequently occurs
- ◉ Consistently occurs

There are problems at a level of sophistication appropriate to the course (beyond mere review of previous course topics) that involve the application of knowledge and skills from Algebra.
Comments?

The problems are rigorous enough for AP Stats but I often have felt that to assign problems from a section you must complete the entire section first, which often doesn't happen in the classroom. I would prefer the topics to be more broken up with problems spread out for the days we do not have enough time. The book has 27 chapters with no sections versus The Practice of Statistics which has 12 chapters broken into 31 sections and each section is progressive in assigned

- ○ Does not occur
- ○ Sometimes occurs
- ◉ Frequently occurs
- ○ Consistently occurs

Rigor: Examine the instructional materials, student practice and assessments. Look for evidence of where the topics explicitly require students to understand concepts, do the assignments that students work on build that understanding, and do assessment tasks reveal whether students understand the mathematics in question?
Comments?

Resource books, video DVD, test bank, solutions manual (digital) are all provided. No digital copy of book is available. Test Prep book for students was also provided.

- ○ Does not occur
- ○ Sometimes occurs
- ○ Frequently occurs
- ◉ Consistently occurs

Rigor: Do the materials feature high-quality conceptual problems and conceptual discussion questions? Do they provide opportunities for multiple representations?

Comments?

Yes, the book does a good job.

- ○ Does not occur
- ○ Sometimes occurs
- ○ Frequently occurs
- ◉ Consistently occurs

Rigor: Are the materials designed so that students attain the fluency and procedural skills required? Evaluate the lessons, chapter/unit assessments, daily routines, and homework assignments for evidence in the development of fluency and procedural skill supported by conceptual understanding.

Comments?

My biggest knock against this book is that it doesn't show enough examples. It does an adequate job, in my opinion, of showing examples but often there is only one. There are so many cases in these statistics questions that a few more examples here and there showing other outcomes would be very helpful.

- ○ Does not occur
- ○ Sometimes occurs
- ◉ Frequently occurs
- ○ Consistently occurs

Rigor: Are the materials designed so that teachers and students spend sufficient time working with applications, without losing focus on the topics defined for the course? Are there single- and multi-step contextual problems that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving?

Comments?

Yes, this is evident on almost every page.

- ○ Does not occur
- ○ Sometimes occurs
- ○ Frequently occurs
- ◉ Consistently occurs

Coherence: Are the materials coherent in their content, do the topics build on each other in a way that is beneficial to the instruction, student practice and assessments?

Comments?

- ○ Does not occur
- ○ Sometimes occurs
- ○ Frequently occurs
- ◉ Consistently occurs