2017-2018 WCSD AP Statistics Program Evaluation Rubric

Evaluator Number

1

Program Number

4

Name of Text

The Practice of Statistics

Publisher

BFW

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?

AP topics are all covered in the text

- ○ 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?

Applications and modeling are consistent throughout the text

- ○ 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 in this text are at a high level of sophistication and involve the application of algebra when appropriate.

- ○ 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?

Yes I believe the assessments will reveal whether students understand the mathematics in question. I was unable to see the test generator though.

- ○ 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 text includes high quality problems with opportunities for discussions and multiple representations.

- ○ 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?

Yes, although I was unable to access some supplemental materials at this time.

- ○ 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, there are many contextual problems within the text and lots of opportunities for practice with high engagement.

- ○ 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?

Yes

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