2017-2018 WCSD Probability/Statistics with Discrete Program Evaluation Rubric

Evaluator Number

2

Program Number

2

Name of Text

Elementary Statistics and Thinking Mathematically

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)

Set Theory
Counting Methods and Probability Theory
Descriptive Statistics
Discrete Probability Distributions
Normal Probability Distributions
Confidence Intervals
Hypothesis Testing with One Sample
Correlation and Regression (including r^2)
Finance
Graph Theory
Logic
Number Representation and Calculation

At least 75% of the topics are in the textbook.
Comments?

All of the topics we currently cover are in these 2 books.

- ○ Less than 25%
- ○ Less than 60% but greater than 25%
- ○ Less than 75% but greater than 60%
- ◉ At least 75%

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

One of the books is all about modeling and there are a lot of real world applications.

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

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

There are a lot of new types of problems that will require more than just Algebra skills. Students will have some prior knowledge coming from Algebra 2.

- ○ 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?

Both books do a good job of having a review and a chapter test at the end of each chapter that relates to the material in the chapter.

- ○ 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?

I see in the teacher editions "answers will vary" which means there can be different answers. With graphs and modeling there can be different 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?

With the order of units we go in currently there can be a gap with procedure skills by moving from one book to another. Expectations from both books are a little different.

- ○ 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?

There is a lot of problem solving and multi-step problems. Both books will engage students and they use a lot of current real world problems.

- ○ 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?

The way the books are designed they do build on each other but with the order of units we go in they would not. We would switch from book to book which is difficult to build off of.

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