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

Evaluator Number

1

Program Number

2

Name of Text

Thinking Mathematically & Elementary Statistics Picturing the World

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?

Since this is a combination of two books it covers all of the topics for this course.

- ○ 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?

Yes, this course lends itself to application/modeling problems.

- ○ 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 is some knowledge and skills from algebra but overall this course doesn't really require a lot of algebra skills.

- ○ 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, questions build on prior knowledge and do reveal student understanding of the math in question.

- ○ 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 has good problem sets (and examples) from basic problems to more rigorous and has problems that lend themselves to discussion.

- ○ 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?

The problem sets are long enough and varied enough to capture both fluency and procedural skills.

- ○ 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, the text is in a manner that supports sufficient work time and without losing focus. There are many contextual problems as this course lends itself to problems in context to help with student 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