TEXTBOOK SELECTION AND ADOPTION FORM

Vital Information

Title Statistical Reasoning in Sports	Price <u>\$70.00</u>
Material (check one): Major text series	Supplementary material
Instructional Course for which material will	be used: Sports Statistics
Author: Tabor, Josh and Franklin, Christine	Publisher: W.H. Freeman
Place of Publication: New York, NY	
Year of Publication: 2011	Edition: 1st
Current Text: None Year of Adoption:	

Please score each item 1-3 points. 1 = Poor 2 = Fair 3 = ExcellentIf an item is not applicable, please mark N/A.

Please provide evidence and/or comments for each indicator.

Section A

Understanding: Content / Standards	Evidence / Comments	Points (1-3)
The materials support big ideas and/or essential questions that are aligned to the department/course curriculum.	More than any other statistics book, this book focuses on the big ideas of statistical reasoning, supporting the goals of the mathematics department for the course.	3
The content addresses district, state and national standards.	The textbook completely covers the Common Core Standards for Statistics and Probability, including all of the 2010 Arizona Standards for Statistics and Probability.	3
The content flows in a logical progression appropriate for this course-from simple to complex, chronological, topical, etc.	The text begins each chapter with an interesting question and then presents the concepts and skills needed to answer that question. Subsequent chapters then build on the material learned in previous chapters.	3

Subtotal 9

Section A (continued)

Understanding: Critical Thinking / Assessment	Evidence / Comments	Points (1-3)
The content, including illustrations and examples, presents ethnic and gender diversity.	Because most the examples use data from professional sports, the book uses male atheletes more than half of the time, but there is an effort to include female athletes when possible. The diversity of ethnicities matches the diversity of the athletes themselves.	2
The materials require learners to be thoughtful, reflective and use high level skills.	Absolutely. Although there are some questions at the "skill" level, most of the exercises and examples require critical thinking and conceptual understanding.	3
The materials include valid and varied assessments-both traditional and performance based.	The student textbook includes a large number of practice items, including chapter review exercises and exercises about applications other than sports. Also, each chapter includes several investigations for students to choose from, allowing students to do in-depth research on an athlete or team of their choice and provide the students with an opportunity for a more authentic assessment. Finally, supplementary materials include sample chapter tests that emphasize statistical reasoning.	3
The assessment tools encourage both assessment of learning and assessment for learning to document student progress and achievement.	The rubrics provided for the investigations allow students and teachers to measure progress and adjust instruction based on the results.	3
The content develops critical 21 st century skills which will enable students to effectively participate in a global society.	In the Learning and Innovation category of the 21 st Century Skills document, the content of this text clearly addresses the Critical Thinking and Problem Solving Standards. Specifially, the text emphasizes Making Judgments and Decisions by effectively analyzing and evaluating evidence, arguments, claims and beliefs and interpreting information and drawing conclusions based on the best analysis.	3

Subtotal <u>14</u>

Understanding: Integration / Differentiation	Evidence / Comments	Points (1-3)
Materials and activities are differentiated to address the diverse abilities, interests and needs of students.	Exercise sets are designed so they include a range of difficulty from vocabulary and basic skills to complex analysis. Also, activities are included in the supplementary materials to help students with diverse learning styles.	2

The materials include interdisciplinary connections and allow for application of skills to promote lifelong learning.	The emphasis of the book is placed on the statistical process, which describes how to ask and answer statistical questions. Throughout the book there are "Stats 101" features which describe how the concepts learned in a sports context can be applied in other contexts. Also, a section of exercises called "Other Applications" provides students the opportunity to apply the concepts they have learned to non-sports settings.	2
The materials reflect a "developmentally appropriate" approach to student learning.	This text takes a very modern approach to statistics education, using hands-on simulations to develop the ideas of inference rather than complicated probability distributions. This makes the text particularly appealing for teaching high school students.	3
Outside experiences, including family involvement, are part of the learning experience.	Many of the examples draw on student experiences outside of the classroom, from the athletic experiences of the students to the games they watch at home or in the stadium with their families. However, the text does not explicitly encourage family involvement.	2

Subtotal

9

Total Points for Section A

<u>32</u>

Section B

Pre-Reading: Background Knowledge	Evidence / Comments	Points (1-3)
Chapter introductions help students relate their own life experiences and previously learned information to the topic.	On occasion, the text asks students to reflect on their athletic experiences and each chapter builds on the skills and concepts introduced in previous chapters. Finally, each chapter concludes with a section titled "ConnectionsLooking Forward, Looking Back" which explicitly makes connections between the material learned in the current chapter, the material learned in previous chapters, and the material to be learned in subsequent chapters.	2
The materials build on the students' prior knowledge within the chapter subsections.	Definitely. The sequencing of the chapters and sections was chosen specifically so that students will be building on (and relying on) prior knowledge.	3

Subtotal

<u>5</u>

Pre-Reading:	Evidence / Comments	Points (1-3)
Purpose Setting		

Chapters begin with a list of objective statements or essential questions indicating what students will learn.	Each chapter begins with a question that directs the learning for that chapter.	2
Section headings are specific enough so that students can convert them to focus questions which direct their reading.	Yes, section headings clearly identify which questions/topics are being addressed.	3

Subtotal

<u>5</u>

Total Points for Section B

<u>10</u>

Section C

Active Reading: Main Ideas	Evidence / Comments	Points (1-3)
Titles of sections within the chapter indicate the main idea of each section.	Yes, chapter, section, and sub-section titles clearly identify the main idea of each section.	3
The main idea of each paragraph is clearly stated and easy to locate.	Yes, the main ideas are kept at the forefront in each paragraph.	3

Subtotal

<u>6</u>

Section C (continued)

Active Reading: Supporting Main Ideas	Evidence / Comments	Points (1-3)
Main idea explanations are thorough.	Yes, it is easy to identify and understand the main ideas.	3
Charts, pictures and other graphics support the main ideas and are appropriately located.	Yes, the text includes lots of graphs and diagrams to help students understand the main ideas of the section.	3
Interesting details are included to expand on the essential information in the text and to engage students.	Yes, in addition to details within the main narrative, the text includes features called "Think About It" which go into more depth about particular statistics or sports-related topics.	3

Active Reading: Organization of Information	Evidence / Comments	Points (1-3)
The text is organized logically, so students can easily take notes.	It would be easy to take outline-style notes using the chapter, section, sub-section structure of the textbook.	3
Signal words are provided to indicate how ideas in the section are related to one another.	Students are often prompted to think about connections between sections within a chapter and connections between chapters. Furthermore, key words such as perfomance, ability, and random chance are written in special font to continuously remind students of the model for athletic performance that is used throughout the book.	3
The presentation of main ideas and details is consistent in each chapter.	Yes, the different pedagogical features (e.g. narrative, problem/solution style examples, chapter summary and review exercises) have the same style and structure is each chapter.	3

Subtotal 9

Active Reading: Vocabulary Development	Evidence / Comments	Points (1-3)
Important words/concepts are highlighted in the text (bold, italics, color).	Yes, key terms are in bold and are defined in the margin or in a definition box in the text. Furthermore, key terms are also included in the chapter summary.	3
Important words/concepts are clearly defined or explained within the reading.	Yes, both within the reading and again in the margin or in a definition box.	3
Concrete examples or analogies are included to clarify abstract ideas.	One of the biggest strengths of the book is how many examples are used to clarify and illustrate important concepts.	3

Section C (continued)

The author provides more than just a definition (e.g. pictures, examples, analogies, counter examples).	Yes, each key term is surrounded by an example illustrating its use.	3
The number of highlighted vocabulary terms is appropriate for the concepts being explained. (Avoid too much jargon!)	Yes, although there is a lot of vocabulary to learn in a statistics class, the number of highlighted terms is appropriate.	3

Subtotal 15

Active Reading: Author's Writing/Student Engagement	Evidence / Comments	Points (1-3)
The author's style engages students—sentence structure is varied and not overly complex, verbs are mostly in the active voice.	The style is engaging and appropriate for a high school post-Algebra 2 statistics course	3
The author uses imagery and concrete examples to help students visualize information.	The author's use of examples is excellent and helps students to visualize important concepts.	3

Subtotal

<u>6</u>

Total Points for Section C

<u>45</u>

Section D

Post Reading: Metacognition	Evidence / Comments	Points (1-3)
The author provides quality questions within and at the end of each chapter. They correlate to the chapter objectives, help students check their understanding as they read, encourage higher order thinking, and promote class or small group discussions.	Within each chapter, many of the examples are in a question/solution format to give students an idea of what good solutions should look like. Chapter exercises range from lower-level questions about vocabulary and basic skills to higher-level questions that ask students to apply their knowledge, critically evaluate evidence, and make decisions. In the supplementary materials, activities are included that are designed to generate class discussions. Finally, the chapter review exercises emphasize the key ideas of the chapter.	3

Section D (continued)

Signal words are provided to indicate how ideas in the section are related to one another.	Students are often prompted to think about connections between sections within a chapter and connections between chapters. Furthermore, key words such as perfomance, ability, and random chance are written in special font to continuously remind students of the model for athletic performance that is used throughout the book.	3	
The summary accurately reflects the main ideas and key supporting information within the chapter.	Yes, the summaries do a good job highlighting the main ideas of the chapter.	3	

Total Points for Section D

9

Section E

Teacher's Guide and other Resources	Evidence / Comments	Points (1-3)
The teacher's guide includes activities for helping students to organize information, to lead their own discussions, and to work in cooperative groups.	The supplementary materials include activities to encourage active learning in cooperative groups. Furthermore, the investigations provided in the student text allow for students to work together to answer their own student-created questions.	3
The materials and instructional plans are well organized and easy to use (teacher friendly).	Yes, pacing guides and suggested homework assignments are included for each chapter and are well organized and easy to use.	3

Total Points for Section E

<u>6</u>

Section F

Ancillary Materials* for Students	Evidence / Comments	Points (1-3)
Ancillary materials expand knowledge of content by focusing on essential ideas.	There are not many ancillary resources for students. However, there are online applets that allow students to investigate the distributions of the various test statistics developed in the text.	2
Ancillary materials meet the varying individual needs of students.	The online applets meet the needs of students, but aren't designed to meet varying needs.	1
Ancillary materials incorporate state of the art technology resources to facilitate teacher use and support student learning.	The applets are an excellent use technology and students are encouraged to use technology to conduct their investigations. The text includes an appendices for Finding and Importing Data	3

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	from the internet and for Using Excel.	

^{*}Workbooks, blackline masters, skill sheets, CDs, videos, DVDs, multi-level libraries, and primary resource documents.

Total Points for Section F

<u>6</u>

Total Points Section A = 32

Total Points Section B = $\underline{10}$

Total Points Section $C = \underline{45}$

Total Points Section D = 9

Total Points Section $E = \underline{6}$

Total Points Section F = 6

Total Points for Text

108

Final Recommendation and explanation:

Statistical Reasoning in Sports is an ideal textbook for a high school statistics course. In addition to the engaging sports context, the text uses hands-on and technology-based simulations to present the big ideas of statistical reasoning, rather than relying on complicated probability distributions. This makes Statistical Reasoning in Sports accessible and relevant to students, while at the same time providing a rigorous introduction to the principles of statistical reasoning.

Submitted by:

Semma delling Teacher	JRHS School	9/7/11 Date
Falund Sallush.	School	
Jany Man	School School	7 /5 // Date
Teacher Teacher	School	9-15-1 Date

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Teacher	School	Date
Meroice Virbai	ė. D. C	4/2/11
Administrator 1 _	School	Date
Who By	IRHS	9/4/11
Administrator	School	— Date
5	AHS	1/15/11
Administrator	School	Date

G-0731©GBEAA-EA STAFF CONFLICT OF INTEREST

- I. Josh Tabor, do hereby indicate:
 - 1. That I am presently an employee of the Amphitheater School District;
 - 2. That I have a substantial interest in the contract, sale, purchase, or service to or decision by the Amphitheater School District Governing Board as described below.
 - 3. That I shall refrain from participating in any manner in my capacity as an employee of the Amphitheater School District in such contract, sale, purchase, service to, or decision by the Governing Board.

Description: I am co-author of the textbook *Statistical Reasoning in Sports*, which is being considered for adoption as the primary textbook for the Sports Statistics class at Canyon del Oro High School in the Amphitheater School District. This course was approved as a post-Algebra 2 mathematics course by the Governing Board during the 2008-2009 school year, has been approved by the NCAA clearinghouse, and meets the 2010 Arizona State Standards for Statistics and Probability. I have taught the course at Canyon del Oro beginning in the 2009-2010 school year using teacher created materials. These materials have evolved into the proposed textbook, *Statistical Reasoning in Sports*, which is the only textbook available for a high-school level course using sports to teach statistics. As a co-author, I earn a royalty on sales of this textbook.

Date

Signature