



AAAS Project 2061 Algebra Textbooks Evaluation

TEXTBOOKS WITH THE POTENTIAL FOR HELPING STUDENTS LEARN ALGEBRA

Summary of Instructional Analysis Ratings for Algebra Textbooks

TEXTBOOK SERIES

| Instructional Categories | <i>Concepts in Algebra</i> Everyday Learning Corporation, 1989 | <i>Contemporary Mathematics in Context (CORE-Plus)</i> Everyday Learning Corporation, 1998 | <i>Focus on Algebra</i> Addison Wesley Longman, 1998 | <i>Interactive Mathematics Program (IMP)</i> Key Curriculum Press, 1997-1999 | <i>MATH Connections: A Secondary Math Core Curriculum</i> It's About Time, Inc., 1998 | <i>Mathematics: Modeling Our World (COMAP/ARISE)</i> South-Western Educational Publishing, 1998 | <i>UCSMP Algebra</i> Scott, Foresman and Company, 1998 |
|--|--|--|--|--|---|---|--|
| I. IDENTIFYING A SENSE OF PURPOSE | | | | | | | |
| Conveying Unit Purpose | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Conveying Lesson Purpose | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Justifying Sequence of Activities | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| II. BUILDING ON STUDENT IDEAS ABOUT MATHEMATICS | | | | | | | |
| Specifying Prerequisite Knowledge | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Alerting Teacher to Student Ideas | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Assisting Teacher in Identifying Ideas | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Addressing Misconceptions | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| III. ENGAGING STUDENTS IN MATHEMATICS | | | | | | | |
| Providing Variety of Contexts | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Providing Firsthand Experiences | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| IV. DEVELOPING MATHEMATICAL IDEAS | | | | | | | |
| Justifying Importance of Standards Ideas | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Introducing Terms and Procedures | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Representing Ideas Accurately | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Connecting Standards Ideas | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Demonstrating/Modeling Procedures | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Providing Practice | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| V. PROMOTING STUDENT THINKING ABOUT MATHEMATICS | | | | | | | |
| Encouraging Students to Explain Their Reasoning | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Guiding Interpretation and Reasoning | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Encouraging Students to Think about What They've Learned | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| VI. ASSESSING STUDENT PROGRESS IN MATHEMATICS | | | | | | | |
| Aligning Assessment | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Assessing through Applications | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Using Embedded Assessment | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

Poor: 0-1.4
 Fair: 1.5-1.9
 Satisfactory: 2-2.4
 Good: 2.5-2.9
 Excellent: 3