



AAAS Project 2061 Algebra Textbooks Evaluation

| Summary of Instructional Analysis Ratings for <i>Algebra: Tools for a Changing World</i> Prentice Hall, 1998 | Idea Set | | |
|--|-----------|-----------|------------|
| | Functions | Variables | Operations |
| Instructional Categories | | | |
| 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