


CONTENTS

Introduction *ix*

SECTION ONE

Calculators and the Classroom: Questions Teachers Ask 1

1. What Is the Best Type of Calculator for Elementary and Middle School Students? 3
2. What Are the Major Differences and Similarities Among the Various Types and Models of Calculators? 4
3. Should All Students in a Class Use the Same Model Calculator? 7
4. What Is Number Sense, and What Role Can Calculators Play in Its Development? 7
5. What Is “Appropriate” or “Sensible” Calculator Use? 9
6. What Issues of Classroom Management Should Be Addressed Regarding Calculator Use? 11
7. Should Schools Develop Policies on Calculator Use? 11
8. What Are the Principles of Good Classroom Practice with Respect to Calculators? 13
9. What Role Should the Calculator Play in Mathematics Teaching? 14
10. What Is an Integrated Approach to Calculator Use, and How Can It Be Implemented? 14
11. Should Lessons Focus Specifically on Calculator Use? 16
12. What Are the Basic Calculator Skills That Children Need to Learn? 16
13. What Activities Can Be Used to Introduce Calculators into the Classroom? 17
14. What Strategies Can Maximize Learning with Calculators? 18
15. How Can Calculators Help Children Learn Basic Number Facts? 19

16. How Can Calculators Be Used to Teach About Specific Mathematical Content? 19
17. How Can Calculators Be Used with the Math Textbook? 20
18. How Can Calculators Help Children Learn About Fractions? 20
19. How Can Calculators Aid in Children's Use of Real-World Data? 21
20. How Can Calculators Be Used to Set Challenges and Devise Problems for Children? 21
21. How Can Children's Learning with Calculators Be Assessed? 21
22. Should Calculators Be Allowed During Tests? 22
23. How Can Activities Be Adapted to Meet the Needs of a Particular Class? 22
24. Can Calculators Help Children with Learning Difficulties? 23
25. What Are the Most Common Parental Concerns Surrounding Calculator Use and How Can They Be Addressed? 23
26. Where Can I Find Other Sources of Calculator Activities? 26

SECTION TWO

Calculator Activities for the Classroom 27

References 87