

## DAFTAR ISI

|                                                                          |      |
|--------------------------------------------------------------------------|------|
| RIWAYAT HIDUP .....                                                      | ii   |
| HALAMAN PERNYATAAN ORISINALITAS .....                                    | iii  |
| HALAMAN PERSETUJUAN PUBLIKASI TUGAS AKHIR SKRIPSI .....                  | iv   |
| ABSTRAK .....                                                            | v    |
| ABSTRACT .....                                                           | vi   |
| KATA PENGANTAR .....                                                     | vii  |
| DAFTAR ISI .....                                                         | x    |
| DAFTAR GAMBAR .....                                                      | xiii |
| DAFTAR TABEL .....                                                       | xiv  |
| DAFTAR LAMPIRAN .....                                                    | xv   |
| 1.1 Latar Belakang .....                                                 | 1    |
| 1.2 Identifikasi Masalah .....                                           | 6    |
| 1.3 Ruang Lingkup .....                                                  | 6    |
| 1.4 Batasan Masalah .....                                                | 7    |
| 1.5 Rumusan Masalah .....                                                | 7    |
| 1.6 Tujuan Penelitian .....                                              | 7    |
| 1.7 Manfaat Penelitian .....                                             | 7    |
| BAB II LANDASAN TEORITIS .....                                           | 9    |
| 2.1 Pembelajaran Matematika .....                                        | 9    |
| 2.1.1 Pembelajaran Matematika SMP .....                                  | 11   |
| 2.1.2 Materi Bangun Ruang Sisi Datar .....                               | 12   |
| 2.2 Pendekatan <i>Realistic Mathematics Education</i> .....              | 23   |
| 2.2.1 Pengertian Pendekatan <i>Realistic Mathematics Education</i> ..... | 23   |
| 2.2.2 Prinsip Pendekatan <i>Realistic Mathematics Education</i> .....    | 26   |

|                                 |                                                                       |    |
|---------------------------------|-----------------------------------------------------------------------|----|
| 2.2.3                           | Karakteristik Pendekatan <i>Realistic Mathematics Education</i> ..... | 26 |
| 2.2.4                           | Teori Belajar yang Mendukung .....                                    | 28 |
| 2.2.5                           | Kelebihan dan Kekurangan RME .....                                    | 31 |
| 2.3                             | Cabri 3D .....                                                        | 32 |
| 2.3.1                           | Pengertian Cabri 3D .....                                             | 32 |
| 2.3.2                           | Karakteristik Cabri 3D .....                                          | 38 |
| 2.3.3                           | Kelebihan dan Kekurangan Cabri 3D .....                               | 38 |
| 2.4                             | Kemampuan Spasial .....                                               | 39 |
| 2.5                             | Penelitian Relevan .....                                              | 41 |
| 2.6                             | Kerangka Berpikir .....                                               | 43 |
| 2.7                             | Hipotesis Penelitian .....                                            | 46 |
| BAB III METODE PENELITIAN ..... |                                                                       | 47 |
| 3.1                             | Lokasi dan Waktu Penelitian .....                                     | 47 |
| 3.2                             | Populasi dan Sampel .....                                             | 47 |
| 3.3                             | Desain dan Variabel Penelitian .....                                  | 47 |
| 3.4                             | Definisi Operasional .....                                            | 48 |
| 3.5                             | Instrumen Penelitian .....                                            | 48 |
| 3.5.1                           | Tes Kemampuan Spasial Siswa .....                                     | 48 |
| 3.6                             | Teknik Pengumpulan Data .....                                         | 49 |
| 3.7                             | Prosedur Penelitian .....                                             | 49 |
| 3.8                             | Analisis Data .....                                                   | 51 |
| 3.8.1                           | Uji Validitas .....                                                   | 51 |
| 3.8.1                           | Uji Reliabilitas .....                                                | 53 |
| 3.8.2                           | Uji Prasyarat .....                                                   | 54 |
| 3.8.2.1                         | Uji Normalitas .....                                                  | 54 |
| 3.8.2.2                         | Uji Homogenitas .....                                                 | 55 |

|                                       |    |
|---------------------------------------|----|
| 3.8.3 Uji Hipotesis .....             | 56 |
| 3.8.4 Ketuntasan Klasikal .....       | 57 |
| 3.8.5 Uji N-Gain .....                | 58 |
| BAB IV HASIL DAN PEMBAHASAN.....      | 59 |
| 4.1 Hasil Penelitian.....             | 59 |
| 4.1.1 Deskripsi Hasil Penelitian..... | 59 |
| 4.1.2 Uji Prasyarat .....             | 60 |
| 4.1.3 Uji Hipotesis .....             | 61 |
| 4.1.4 Ketuntasan Klasikal .....       | 62 |
| 4.1.5 N-Gain .....                    | 63 |
| 4.2 Pembahasan .....                  | 65 |
| 4.3 Keterbatasan Penelitian .....     | 72 |
| BAB V KESIMPULAN .....                | 73 |
| 5.1 Kesimpulan.....                   | 73 |
| 5.2 Saran .....                       | 73 |
| DAFTAR PUSTAKA .....                  | 75 |
| LAMPIRAN.....                         | 81 |

## DAFTAR GAMBAR

|                                                             |    |
|-------------------------------------------------------------|----|
| Gambar 2. 1 Kubus ABCD.EFGH .....                           | 13 |
| Gambar 2. 2 Bidang Kubus.....                               | 13 |
| Gambar 2. 3 Rusuk kubus .....                               | 14 |
| Gambar 2. 4 Titik sudut.....                                | 14 |
| Gambar 2. 5 Digonal sisi kubus .....                        | 14 |
| Gambar 2. 6 Panjang diagonal sisi kubus .....               | 15 |
| Gambar 2. 7 Diagonal ruang kubus.....                       | 15 |
| Gambar 2. 8 Segitiga BDH .....                              | 16 |
| Gambar 2. 9 Bidang diagonal kubus .....                     | 16 |
| Gambar 2. 10 Jaring-jaring kubus .....                      | 17 |
| Gambar 2. 11 Luas permukaan kubus .....                     | 17 |
| Gambar 2. 12 Balok ABCD.EFGH .....                          | 18 |
| Gambar 2. 13 Diagonal sisi balok .....                      | 19 |
| Gambar 2. 14 Diagonal ruang balok .....                     | 20 |
| Gambar 2. 15 Bidang diagonal balok.....                     | 21 |
| Gambar 2. 16 Bidang diagonal yang dibatasi tinggi .....     | 21 |
| Gambar 2. 17 Bidang diagonal yang dibatasi panjang.....     | 22 |
| Gambar 2. 18 Bidang diagonal yang dibatasi lebar .....      | 22 |
| Gambar 2. 19 Jaring-jaring balok.....                       | 23 |
| Gambar 2. 20 Lembar kerja Cabri 3D.....                     | 35 |
| Gambar 2. 21 Menu utama Cabri 3D .....                      | 35 |
| Gambar 2. 22 Kerangka berpikir.....                         | 45 |
| Gambar 3. 1 Skema Prosedur Penelitian .....                 | 51 |
| Gambar 4. 1 Gambar Grafik Scatter Plot .....                | 74 |
| Gambar 4. 2 Gambar Diagram Batang Ketuntasan Klasikal ..... | 78 |

## DAFTAR TABEL

|                                                               |    |
|---------------------------------------------------------------|----|
| Tabel 1. 1 Hasil tes kemampuan awal spasial siswa .....       | 2  |
| Tabel 2. 1 Perintah penting menu utama Cabri 3D V2 Plus ..... | 36 |
| Tabel 2. 2 Alat Cabri Cabri 3D V2 Plus .....                  | 37 |
| Tabel 2. 3 Aspek kemampuan spasial .....                      | 41 |
| Tabel 3. 1 Desain Penelitian .....                            | 47 |
| Tabel 3. 2 Skala Kriteria Aiken .....                         | 52 |
| Tabel 3. 3 Skor Indeks Aiken Instrumen .....                  | 52 |
| Tabel 3. 4 Hasil Uji Reliabilitas Instrumen .....             | 54 |
| Tabel 3. 5 Kriteria ketuntasan klasikal .....                 | 58 |
| Tabel 3. 6 Kriteria N-Gain .....                              | 58 |
| Tabel 4. 1 Analisis Deskriptif .....                          | 59 |
| Tabel 4. 2 Hasil Uji Normalitas .....                         | 60 |
| Tabel 4. 3 Hasil Uji Homogenitas Pretest .....                | 61 |
| Tabel 4. 4 Hasil Uji Independent Sample t-test .....          | 62 |
| Tabel 4. 5 Ketuntasan Klasikal Siswa .....                    | 62 |
| Tabel 4. 6 Nilai N-Gain .....                                 | 64 |

## DAFTAR LAMPIRAN

|                                                                           |     |
|---------------------------------------------------------------------------|-----|
| Lampiran 1. Tes Kemampuan Awal .....                                      | 81  |
| Lampiran 2. Alternatif Penyelesaian Tes Kemampuan Awal .....              | 87  |
| Lampiran 3. Modul Ajar Kelas Eksperimen .....                             | 94  |
| Lampiran 4. Lembar Kerja Peserta Didik (LKPD) .....                       | 116 |
| Lampiran 5. Kisi-kisi Instrumen Penelitian .....                          | 132 |
| Lampiran 6. Instrumen Pretest .....                                       | 133 |
| Lampiran 7. Alternatif Penyelesaian Pretest .....                         | 136 |
| Lampiran 8. Instrumen Posttest .....                                      | 141 |
| Lampiran 9. Alternatif Penyelesaian Posttest .....                        | 145 |
| Lampiran 10. Rubrik Penilaian Instrumen Soal .....                        | 150 |
| Lampiran 11. Lembar Validasi Modul Ajar .....                             | 152 |
| Lampiran 12. Lembar Validasi LKPD .....                                   | 161 |
| Lampiran 13. Lembar Validasi Prettest .....                               | 170 |
| Lampiran 14. Lembar Validasi Posttest .....                               | 179 |
| Lampiran 15. Lembar Validasi Observasi Penelitian .....                   | 188 |
| Lampiran 16. Data Hasil Uji Coba Instrumen .....                          | 190 |
| Lampiran 17. Hasil Uji Validitas Indeks Aiken Modul Ajar .....            | 192 |
| Lampiran 18. Hasil Uji Validitas Indeks Aiken LKPD .....                  | 194 |
| Lampiran 19. Hasil Uji Validitas Instrumen Indeks Aiken Pretest .....     | 196 |
| Lampiran 20. Hasil Uji Validitas Instrumen Indeks Aiken Posttest .....    | 197 |
| Lampiran 21. Hasil Uji Reabilitas Instrumen .....                         | 198 |
| Lampiran 22. Tabulasi Skor Kemampuan Spasial Siswa Kelas Kontrol .....    | 206 |
| Lampiran 23. Tabulasi Skor Kemampuan Spasial Siswa Kelas Eksperimen ..... | 208 |
| Lampiran 24. Hasil Uji Normalitas Data .....                              | 210 |
| Lampiran 25. Hasil Uji Homogenitas Data .....                             | 220 |
| Lampiran 26. Hasil Uji Hipotesis .....                                    | 223 |
| Lampiran 27. Tabel Ketuntasan Klasikal .....                              | 225 |
| Lampiran 28. Uji N-Gain .....                                             | 227 |
| Lampiran 29. Surat Izin Penelitian .....                                  | 231 |

|                                                                   |     |
|-------------------------------------------------------------------|-----|
| Lampiran 30. Surat Keterangan Telah Melaksanakan Penelitian ..... | 232 |
| Lampiran 31. Dokumentasi Penelitian .....                         | 233 |



THE  
*Character Building*  
UNIVERSITY