

BAB V

PENUTUP

A. Kesimpulan

Berdasarkan hasil pengembangan dan pembahasan yang telah dilakukan, dapat diberi kesimpulan bahwa :

1. Proses pengembangan dimulai dengan analisis kebutuhan guru dan siswa terhadap bahan ajar yang akan dikembangkan. Selanjutnya, dilakukan perancangan produk yang melibatkan penyusunan instrumen dan *outline* produk. Produk yang telah dirancang kemudian dikembangkan, dan tahap terakhir melakukan evaluasi dari e-modul yang telah digunakan dalam pembelajaran.
2. Kualitas produk dinilai dari segi validitas, praktisitas, dan efektivitas. E-Modul menunjukkan tingkat validitas yang tinggi, mencapai skor rata-rata sebesar 89,20% dalam aspek materi, bahasa, dan media. Uji kepraktisan produk juga memperoleh skor rata-rata sebesar 83,83%. Sementara itu, keefektifan produk dikategorikan sangat efektif dengan skor rata-rata hasil tes siswa mencapai 82,41%.
3. Kemampuan *Disciplinary Core Ideas* siswa yang mempunyai kemampuan cepat (*faster learner*) menggunakan pembelajaran mandiri (*self learner*) dengan rata-rata nilai 89,13 lebih tinggi dibandingkan pembelajaran biasa dengan pembelajaran tambahan (*regular teaching + tutorial*) rata-rata nilai 84,00 Sehingga kelompok kemampuan cepat (*faster learner*) lebih cocok belajar menggunakan pembelajaran mandiri dibandingkan dengan pembelajaran tambahan + tutorial.

4. Kemampuan *Disciplinary Core Ideas* siswa yang mempunyai kemampuan lambat (*slower learner*) menggunakan pembelajaran mandiri (*self learner*) rata-rata nilai 77,57 lebih rendah dibandingkan pembelajaran biasa ditambah pembelajaran tambahan (*regular teaching + tutorial*) dengan rata-rata nilai 81,11. Sehingga kelompok kemampuan lambat (*slower learner*) lebih cocok belajar menggunakan pembelajaran pembelajaran tambahan + tutorial dibandingkan dengan pembelajaran mandiri.

B. Saran

Peneliti memberikan beberapa saran terkait dengan penelitian ini yaitu:

1. E-modul dapat dikembangkan oleh guru dengan materi lainnya dalam pembelajaran fisika.
2. Peneliti selanjutnya diharapkan dapat mengoptimalkan waktu dengan efisien, sehingga proses pembelajaran dapat berjalan dengan lancar dan mendapatkan hasil yang lebih memuaskan, tanpa terganggunya durasi pembelajaran.

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