ABSTRAK

PENGEMBANGAN VIDEO PEMBELAJARAN BERBASIS ANIMASI PADA

MATERI PROSES METABOLISME KELAS XII

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Saat pandemi, guru SMA mengalami kendala mengajar secara daring. Kendala tersebut antara lain keterbatasan media untuk menyampaikan materi, jaringan tidak stabil dan keterbatasan kuota. Selain itu, waktu yang terbatas saat kelas daring mengakibatkan guru tidak dapat menyampaikan materi dengan tuntas. Berdasarkan hasil wawancara dengan 5 guru SMA, materi biologi sulit dipahami peserta didik adalah metabolisme karena terdapat reaksi biokimia yang bersifat abstrak. Peserta didik lebih mudah memahami materi menggunakan media visual seperti video animasi. Animasi merupakan salah satu media pembelajaran yang dapat digunakan untuk menyampaikan materi berupa kumpulan karakter bergerak. Berdasarkan permasalahan tersebut, peneliti melakukan penelitian dan pengembangan video pembelajaran berbasis animasi sebagai media pembelajaran materi proses metabolisme kelas XII. Selain itu, tujuan pengembangan video pembelajaran berbasis animasi untuk mengetahui kelayakan video pembelajaran dalam memahamkan materi proses metabolisme.

Penelitian ini menggunakan penelitian R & D model ADDIE hingga tahap validasi. Penelitian dimulai analisis kebutuhan dengan guru biologi di SMA, pengembangan produk dan validasi. hasil pengembangan media berupa video pembelajaran yang untuk menjelaskan proses metabolisme. Hasil dari pengembangan video pembelajaran divalidasii oleh 4 validator yang terdiri dari ahli materi dan media serta 2 guru biologi sebagai praktisi. Hasil validasi aspek media diperoleh skor 3,5 termasuk kategori sangat baik. Validasi aspek materi memperoleh skor 3,6 termasuk kategori sangat baik. Skor validasi menunjukan video pembelajaran layak digunakan dengan catatan revisi masukan dan komentar dari validator.

Kata kunci: Video pembelajaran, animasi, proses metabolisme

ABSTRACT

DEVELOPMENT OF ANIMATION – BASED LEARNING VIDEOS ON THE MATERIAL OF CLASS XII METABOLIC PROCESS

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During the pandemic, educators at schools experienced several obstacles in teaching students online. Some of these obstacles include limited media in delivering material, unstable networks, and limited quotas. In addition, the limited time in teaching resulted in the teacher not being able to convey the material in its entirety to the students. Based on the results of interviews conducted with 5 teachers in one high school, there is material in biology that is difficult for students to understand, namely metabolism. In the matter of metabolism, there are biochemical reactions that are abstract. Students are easier to understand the material by using visual media such as animated videos. Animation is one of the learning media that can be used to convey material in the form of a collection of moving characters. Based on these problems, the researcher researched and developed animation-based learning videos as a medium for learning the material for class XII metabolic processes. In addition, the purpose of developing animation-based learning videos is to determine the feasibility of learning videos in understanding the material of metabolic processes

This study uses the type of R & D research with the ADDIE model up to the validation stage. The research started by analyzing the needs of biology teachers in high school, product development, and validation. The results of the development of the media in the form of learning videos explain the metabolic process. The results of the development of the learning video were validated by 4 validators consisting of material and media experts and 2 biology teachers as practitioners. The results of the media aspect validation obtained a score of 3.5 including the very good category. Validation of the material aspect obtained a score of 3.6 including the very good category. The validation score shows that the learning video is feasible to use with notes on the revision of input and comments from the validator.

Keywords: Learning video, animation, metabolic process