

## **Pengembangan Modul Biologi Dengan Pendekatan Saintifik Pada Materi Sistem Pencernaan Di Kelas Xi Mia Sma Swasta Tunas Pelita Binjai**

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### **Abstrak**

Penelitian ini bertujuan untuk mengetahui tingkat kelayakan modul biologi dengan pendekatan saintifik pada materi sistem pencernaan. Jenis penelitian yang digunakan adalah penelitian pengembangan (*R&D*) dengan model pengembangan produk 4-D. Model ini meliputi 4 tahap, yaitu: (1) *define*; (2) *design*; (3) *develop*; (4) *disseminate*. Penelitian ini dibatasi hingga tahap pengembangan (*develop*), yaitu hanya sampai tahap uji kelayakan produk. Penelitian ini dimulai sejak bulan Mei-Oktober 2019 di SMA Swasta Tunas Pelita Binjai. Subjek dalam penelitian ini adalah 3 orang dosen sebagai validator, 4 guru biologi serta 26 orang siswa kelas XI MIA SMA Swasta Tunas Pelita Binjai, objek penelitian berupa modul biologi dengan pendekatan saintifik yang telah dikembangkan. Modul yang dikembangkan divalidasi oleh ahli materi, ahli pembelajaran, ahli desain grafis, guru, dan siswa. Data tentang kualitas produk pengembangan ini dikumpulkan dengan angket. Data dianalisis dengan teknik deskriptif kuantitatif dan kualitatif. Hasil penelitian menunjukkan bahwa rata-rata penilaian kelayakan oleh ahli materi sebesar 3,3 dan 3,5 dengan kriteria “sangat layak”; ahli pembelajaran sebesar 3,7 dan 3,8 dengan kriteria “sangat layak”; ahli desain grafis sebesar 4 dengan kriteria “sangat layak”; penilaian guru biologi sebesar 4 dengan kriteria “sangat layak”; uji coba kelompok terbatas sebesar dikategorikan “layak”. Dapat disimpulkan bahwa produk penelitian pengembangan modul biologi dengan pendekatan saintifik pada materi sistem pencernaan ini layak digunakan sebagai bahan ajar siswa kelas XI MIA.

**Kata Kunci: Pengembangan, Modul, Saintifik, Sistem Pencernaan**

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**Development of Biology Module with Scientific Approach to Digestive System  
Material in Xi Mia High School Class Private Budding Pelita Binjai**

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**Abstract**

This study aims to determine the feasibility of a biology module with a scientific approach to the digestive system material. This type of research is a research and development (R&D) with a 4-D product development model. This model includes 4 stages, namely: (1) define; (2) design; (3) develop; (4) disseminate. This research is limited to the development stage, which is only to the product feasibility test stage. This research began in May-October 2019 at Tunas Pelita Binjai Private High School. The subjects in this study were 3 lecturers as validators, 4 biology teachers and 26 students of class XI MIA Tunas Pelita Binjai High School, the object of research was a biology module with a scientific approach that had been developed. Modules developed are validated by material experts, learning experts, graphic design experts, teachers, and students. Data about the quality of these development products was collected by a questionnaire. Data were analyzed using quantitative and qualitative descriptive techniques. The results showed that the average eligibility assessment by material experts was 3.3 and 3.5 with "very feasible" criteria; learning experts 3,7 and 3,8 with "very feasible" criteria; graphic design expert by 4 with the criteria "very feasible"; biology teacher assessment of 4 with the criteria "very feasible"; limited group trials of categorized as "eligible". It can be concluded that the research product of the development of biology modules with a scientific approach to the digestive system material is feasible to be used as teaching material for class XI MIA students.

**Keywords: Development, Modules, Scientific, Pencesrnaan System**

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