

**PENGEMBANGAN MEDIA PEMBELAJARAN IPA INOVATIF
BERBANTUAN *SMART APPS CREATOR* PADA MATERI SISTEM
PERNAPASAN MANUSIA UNTUK SISWA SMP**

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ABSTRAK

Penelitian ini dilaksanakan dengan tujuan menghasilkan media pembelajaran IPA inovatif pada materi sistem pernapasan manusia untuk siswa SMP yang memenuhi kriteria valid dan praktis. Penelitian menggunakan metode Research and Development (R&D) dengan mengadopsi model pengembangan 4-D yang meliputi tahap *define*, *design*, *develop*, dan *disseminate* yang dibatasi hingga tahap *develop*. Subjek penelitian terdiri atas sepasang ahli materi dan media, dua guru IPA, dan sepuluh siswa kelas VIII SMP. Data penelitian diperoleh melalui angket validitas dan angket kepraktisan, kemudian dianalisis menggunakan teknik deskriptif kuantitatif. Data hasil validasi mengindikasikan bahwa perangkat ini mencatatkan indeks *Content Validity* (CV) senilai 0,87 dari peninjauan pakar materi dan 0,92 dari evaluasi pakar media, yang menempatkan keduanya pada kualifikasi sangat valid. Di samping itu, tingkat kepraktisan media dibuktikan dengan perolehan rerata skor 3,60 oleh pendidik IPA serta 3,72 dari respons peserta didik, di mana kedua penilaian tersebut masuk dalam predikat sangat praktis. Berdasarkan temuan tersebut, media pembelajaran IPA inovatif berbantuan Smart Apps Creator pada materi sistem pernapasan manusia dinyatakan memenuhi kriteria sangat valid dan sangat praktis sehingga layak dimanfaatkan sebagai salah satu alternatif media pembelajaran IPA di tingkat SMP.

Kata kunci: media pembelajaran IPA inovatif, Smart Apps Creator, sistem pernapasan manusia, model pengembangan 4-D, Ilmu Pengetahuan Alam.

**DEVELOPMENT OF AN INNOVATIVE SCIENCE LEARNING MEDIA
ASSISTED BY SMART APPS CREATOR ON THE HUMAN RESPIRATORY
SYSTEM MATERIAL FOR JUNIOR HIGH SCHOOL STUDENTS**

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ABSTRACT

This study was conducted with the objective of developing an innovative science learning medium focused on the human respiratory system for junior high school students that meets the criteria of being valid and practical. The research employed the Research and Development (R&D) method, adopting the 4-D development model which encompasses the phases of define, design, develop, and disseminate; however, this study was limited to the develop stage. The research subjects consisted of a pair of material and media experts, two science teachers, and ten eighth-grade junior high school students. Research data were gathered through validity and practicality questionnaires, which were subsequently analyzed using descriptive quantitative techniques. The validation data indicated that the developed medium recorded a Content Validity (CV) index of 0.87 from the material expert review and 0.92 from the media expert evaluation, placing both in the highly valid qualification. Furthermore, the practicality level of the medium was demonstrated by an average score of 3.60 from science educators and 3.72 from student responses, both of which fall into the highly practical predicate. Based on these findings, the innovative science learning medium assisted by Smart Apps Creator on the human respiratory system material is declared to meet the highly valid and highly practical criteria, making it suitable for utilization as an alternative science learning medium at the junior high school level.

Keywords: innovative science learning media, Smart Apps Creator, human respiratory system, 4-D development model, science education.