

**PENGEMBANGAN MEDIA PEMBELAJARAN *GOOGLE SITES*
BERBASIS STEM MATERI PENCEMARAN LINGKUNGAN KELAS X
DI SMA NEGERI BALI MANDARA**

Oleh

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ABSTRAK

Penelitian ini bertujuan untuk mengetahui (1) rancang bangun media pembelajaran *Google Sites* berbasis STEM pada pokok bahasan pencemaran lingkungan kelas X di SMA Negeri Bali Mandara, (2) validitas pengembangan media pembelajaran *Google Sites* berbasis STEM pada pokok bahasan pencemaran lingkungan kelas X di SMA Negeri Bali Mandara dan (3) kepraktisan pengembangan media pembelajaran *Google Sites* berbasis STEM pada pokok bahasan pencemaran lingkungan kelas X di SMA Negeri Bali Mandara. Jenis penelitian ini yaitu penelitian pengembangan (R & D) yang mengacu pada model pengembangan ADDIE yang meliputi tahap *analysis*, *design* dan *development*. Uji validitas yang dilakukan melibatkan ahli bahasa, media dan materi. Uji Kepraktisan yang terdiri dari uji kepraktisan guru dan peserta didik. Subjek uji coba produk dalam penelitian ini adalah peserta didik kelas X MIPA 2. Analisis data dilakukan secara deskriptif untuk mengetahui validitas dan kepraktisan. Hasil penelitian menunjukkan, (1) setiap tahapan pengembangan menghasilkan sebuah produk berupa media pembelajaran *Google Sites* berbasis pendekatan STEM yang berisikan 8 menu utama yaitu identitas, peta konsep, materi, kegiatan belajar, *relaxing zone*, evaluasi, bantuan, dan credit (2) hasil uji validitas bahasa sebesar 4,84 dilanjutkan uji validitas media sebesar 4,52 dan uji validitas materi 4,66 yang didapatkan nilai rata-rata total sebesar 4,67 dinyatakan sangat valid (3) uji kepraktisan guru sebesar 91,76% sangat praktis dan uji kepraktisan peserta didik sebesar 86,44 % sangat praktis kemudian hasil nilai rata-rata total kepraktisan 88,10% dinyatakan sangat praktis. Berdasarkan hasil penelitian tersebut, berupa media pembelajaran *Google Sites* berbasis pendekatan STEM yang dikembangkan sangat valid dan sangat praktis digunakan sebagai media pembelajaran materi pencemaran lingkungan kelas X di SMA Negeri Bali Mandara.

Kata kunci: *Google Sites*, Pendekatan STEM, Pencemaran Lingkungan

**DEVELOPMENT OF *GOOGLE SITES* LEARNING MEDIA BASED ON
STEM ENVIRONMENTAL POLLUTION MATERIAL CLASS X AT SMA
NEGERI BALI MANDARA**

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ABSTRACT

This study aims to determine (1) the design of the STEM based Google Sites learning media on the subject of environmental pollution in class X at SMA Negeri Bali Mandara, (2) the validity of the development of STEM-based Google Sites learning media on the subject of environmental pollution in class X in SMA Negeri Bali Mandara and (3) the practicality of developing STEM-based Google Sites learning media on the subject of environmental pollution in class X at SMA Negeri Bali Mandara. This type of research is development research (R & D) which refers to the ADDIE development model which includes the analysis, design and development stages. The validity test was carried out involving language, media and material experts. Practicality test which consists of practicality test for teachers and students. The product test subjects in this study were students of class X MIPA 2. Data analysis was carried out descriptively to determine the validity and practicality. The results show, (1) each stage of development produces a product in the form of learning media Google Sites based on the STEM approach which contains 8 main menus namely identity, concept maps, materials, learning activities, relaxing zone, evaluation, assistance, and credit (2) results the language validity test was 4.84 followed by the media validity test at 4.52 and the material validity test at 4.66 which obtained a total average value of 4.67 which was declared very valid (3) the teacher practicality test of 91.76% was very practical and The practicality test of students is 86.44% very practical then the results of the average total practicality value of 88.10% are stated to be very practical. Based on the results of the study, in the form of Google Sites learning media based on the STEM approach that was developed, it is very valid and very practical to use as a medium for learning environmental pollution material for class X at SMA Negeri Bali Mandara.

Keywords: *Google Sites, STEM Approach, Environmental Pollution*