

# **PELATIHAN PENERAPAN *MICROLEARNING INVESTIGATIF* SECARA FLEKSIBEL MENGGUNAKAN *TEMPLATE HYPERDOCS***

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## **ABSTRACT**

This investigative microlearning (IML) training with experimental video clip facilities aims to strengthen scientific skills for teachers and students in the era of advances in information technology and the increasing need for mobile learning programs that must be robust in an environment of artificial intelligence (AI) application. IML is self-contained with flexible presentation organization using hyperdocs templates. The training set consists of a pair of IMLs with inductive and deductive reasoning as well as three IMLs closely related with inductive reasoning. Each IML is divided into several documents, namely worksheet with a number of supporting document links, affirmative lesson material texts according to the assignment content in the worksheet, as well as assignments and concept mastery assessments. The training was carried out three times in three weeks, namely once in the first week offline where the teacher himself, accompanied by the Implementation Team, practiced filling in the worksheet and then on another day tried to apply it himself to the students in class. Then, in the 2nd and 3rd weeks, mentoring is provided via zoom meetings to overcome possible problems encountered in its implementation in the classroom. The training was carried out smoothly and received high appreciation from the participants. There were participants who asked to be given video clips to support other learning materials such as Chemical Equilibrium.

**Keywords:** investigative microlearning, self-contained, hyperdocs template, flexible presentation organization

## **ABSTRAK**

Pelatihan *microlearning* investigatif (MLI) dengan fasilitas video klip eksperimental ini bertujuan untuk memperkuat keterampilan ilmiah bagi guru dan siswa di era kemajuan teknologi informasi dan semakin meningkatnya kebutuhan akan program *mobile learning* yang harus tangguh dalam lingkungan aplikasi kecerdasan buatan (AI). MLI berupa perangkat belajar lengkap dengan organisasi presentasi yang fleksibel menggunakan templat hyperdocs. Materi pelatihan terdiri dari sepasang MLI dengan penalaran induktif dan deduktif serta tiga MLI yang berkaitan erat dengan penalaran induktif. Masing-masing MLI dibagi menjadi beberapa dokumen, yaitu LKPD dengan sejumlah tautan dokumen pendukung, teks materi pembelajaran afirmatif sesuai isi tugas pada LKS, serta tugas dan penilaian penguasaan konsep. Pelatihan dilaksanakan tiga kali dalam tiga minggu yaitu satu kali pada minggu pertama secara *offline* di mana guru sendiri didampingi Tim Pelaksana berlatih mengisi LKPD kemudian pada hari lain mencoba menerapkan sendiri kepada siswa di kelas. Kemudian pada minggu ke-2 dan ke-3 dilakukan pendampingan melalui *zoom meeting* untuk mengatasi kemungkinan permasalahan yang ditemui dalam pelaksanaannya di kelas. Pelatihan terlaksana dengan lancar dan mendapat apresiasi yang tinggi dari para peserta. Ada peserta yang meminta diberikan video klip untuk menunjang materi pembelajaran lainnya seperti Kesetimbangan Kimia

**Kata kunci:** *microlearning* investigatif, *perangkat belajar lengkap*, *templat hyperdocs*, organisasi penyajian fleksibel