

Pengembangan Laboratorium Virtual pada Materi Sistem Koordinasi Kelas XI MIPA dengan Basis Model *Discovery Learning*

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Abstract: The purpose of this research was to 1) know the characteristics of virtual laboratory learning media in the material of human coordination system on the basis of discovery learning; and 2) know the feasibility of virtual laboratory learning media on human coordination system material on the basis of discovery learning. The research was using a 4-D Model adapted from Thiagarajan (1974), covering the stages of define, design, develop, and disseminate, then modified into 3-D without the disseminate stage. The product feasibility assessment was carried out by media expert validators, material experts, construction experts, teacher practitioners, and students of class XI MIPA SMA N 7 Surakarta in limited trials consisting of 20 students taken from XI MIPA 1,3,4,5, and 6 each of 4 students and field trials of class XI MIPA 2 were 34 students through filling out questionnaires with a 1-4 Likert scale in the form of a checklist. Data analysis techniques in the form of quantitative data and qualitative data. Quantitative analysis is derived from the media feasibility questionnaire score which results in a percentage score then converted into eligibility assessment criteria. Qualitative analysis comes from suggestions and comments as reference for product improvement. This study concludes that: 1) the characteristics of virtual laboratories in the form of applications developed using Adobe Animate 2017 software contain materials maps, practicum activities, and evaluations compiled on the basis of discovery learning models and worked on LKPD; 2) the feasibility of a virtual laboratory that is assessed by validators, practitioners and students states that the media product developed has a very high level of validity, so it is feasible..

Keywords: virtual laboratory, discovery learning, coordination systems

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