EXECUTIVE SUMMARY

Afifah Osesli, 2021. "Pengembangan Modul Biologi Problem Solving yang disertai *Concept Mapping* pada Materi Sistem Koordinasi Kelas XI IPA SMAN 1 Batusangkar". Skripsi. Program Studi Pendidikan Biologi. Fakultas Keguruan dan Ilmu Pendidikan, Universitas Bung Hatta.

Oleh **: Afifah Osesli**

Pembimbing **: Dra. Lisa Deswati, M.Si**

Penelitian pengembangan ini bertujuan untuk menghasilkan modul biologi berbasis problem solving yang disertai *concept mapping* yang valid dan praktis pada materi sistem koordinasi. Penelitian dilaksanakan di SMAN 1 Batusangkar dengan populasi 180 siswa kelas XI IPA 1-5 SMAN 1 Batusangkar yang terdaftar pada semester genap 2020/2021, dengan sampel 45 orang siswa. Teknik pengambilan sampel adalah *random sampling* yaitu dilakukan secara acak dengan sistem undian untuk pengambilan 9 orang sampel setiap kelas. Instrumen penelitian ini menggunakan angket validitas dan praktikalitas. Validator terdiri dari 3 (tiga) orang dosen, sedangkan praktikalitas terdiri dari 1 (satu) orang guru dan 45 orang siswa SMAN 1 Batusangkar. Hasil penelitian menunjukkan bahwa modul yang dikembangkan valid yaitu (85,55%) dengan tiga aspek penilaian: kelayakan isi 90% (sangat valid), aspek kebahasaan 83,33% (valid), dan aspek penyajian 83,33% (valid) . Modul yang dihasilkan juga sangat praktis oleh guru (94,15%) dengan empat aspek penilaian: kemudahan penggunaan 92,86% (sangat praktis), manfaat 95% (sangat praktis), daya tarik 95% (sangat praktis), dan waktu pembelajaran 93,75% (sangat praktis) serta praktis oleh siswa (86,58%) dengan empat aspek penilaian: kemudahan penggunaan 88% (praktis), manfaat 85% (praktis), daya tarik 87,22% (praktis), dan waktu pembelajaran 86,11% (praktis). Dari hasil penelitian dapat disimpulkan bahwa modul biologi berbasis problem solving yang disertai *concept mapping* yang dikembangkan valid dan praktis sehingga dapat digunakan dalam proses pembelajaran materi sistem koordinasi.

Kata kunci: modul, *problem solving*, *concept mapping*, valid, praktis

EXECUTIVE SUMMARY

Afifah Osesli, 2021 . "Development of Problem Solving Biology Module accompanied by Concept Mapping in Coordination System Material Class XI IPA SMAN 1 Batusangkar". Essay. Biological Education Study Program. Faculty of Teacher Training and Education, Bung Hatta University.

By **: Afifah Osesli**

Advisor **: Dra. Lisa Deswati, M.Si**

Development research aims to produce a biology module-based problem solving accompanied by concept mapping a valid and practical in the material coordinate system. The research was conducted in SMAN 1 Batusangkar with a population of 180 students of class XI IPA 1 min-5 max SMAN 1 Batusangkar registered in the second semester of 2020/2021, with a sample of 45 students. The sampling technique is random sampling is done randomly by a lottery system for the retrieval of 9 samples of each class. This research instrument uses a questionnaire validity and practicalities. Validator consists of 3 (three) lecturers, while the practicalities consists of one (1) person of teachers and 45 students of SMAN 1 Batusangkar. The results showed that the module developed is valid, namely (85,55%) with three aspects of assessment: feasibility of contents 90% (very valid), aspects of language 83,33% (valid), and aspects of the presentation of the 83,33% (valid) . Module that is produced is also very practical by the teacher (94,15%) with four aspects of assessment: the ease of use of 92.86% (very practical), the benefits of 95% (very practical), the attractiveness of 95% (very practical), and the learning time 93,75% (very practical) as well as practical by students (86,58%) with four aspects of assessment: the ease of use of 88% (practical), the benefits of 85% (practical), appeal 87,22% (practical), and the learning time 86,11% (practical). From the results of the research can be concluded that the biology module-based problem solving accompanied by concept mapping app developed valid and practical so that it can be used in the process of learning the material coordinate system.

Keywords: *module, problem solving, concept mapping, valid, practical*