

## ABSTRAK

**Yusep Heri Agustian, (2021).** “Model Pembelajaran *Advance Organizer* Melalui Pendekatan Saintifik dan Konstruktivisme Untuk Meningkatkan Kemampuan Representasi Matematik, Pemahaman Matematik, dan Sikap Peserta Didik”.

Penelitian ini bertujuan untuk menelaah peningkatan kemampuan representasi matematik, pemahaman matematik, dan sikap belajar peserta didik dengan penerapan model Pembelajaran *Advance Organizer* melalui pendekatan Saintifik dan Konstruktivisme. Penelitian menggunakan *mix methods* dengan desain penelitian adalah kelompok kontrol dengan pretes dan postes. Populasinya seluruh peserta didik SMKN Manonjaya tahun pelajaran 2020/2021. Pengambilan sampel secara acak (*random*) diperoleh peserta didik kelas X TKJ 1 sebagai kelas eksperimen 1, X TKJ 2 sebagai kelas eksperimen 2 dan kelas X TKJ 3 sebagai kelas kontrol. Instrumen terdiri dari tes dan non-tes. Tes berupa soal kemampuan representasi matematik dan soal pemahaman matematik. Instrumen non-tes berupa lembar observasi sikap peserta didik. Analisis hipotesis dilakukan dengan Anova satu jalur, uji-F dan N-Gain. Hasil penelitian menyimpulkan bahwa (1) Peningkatan kemampuan representasi matematik peserta didik yang mengikuti pembelajaran *Advance Organizer* melalui pendekatan konstruktivisme lebih baik daripada peserta didik yang mengikuti pembelajaran *Advance Organizer* melalui pendekatan saintifik dan peserta didik yang mengikuti pembelajaran *Discovery Learning* melalui pendekatan saintifik.; (2) Peningkatan pemahaman matematik peserta didik yang mengikuti pembelajaran *Advance Organizer* melalui pendekatan saintifik lebih baik daripada peserta didik yang mengikuti pembelajaran *Advance Organizer* melalui pendekatan konstruktivisme dan peserta didik yang mengikuti pembelajaran *Discovery Learning* melalui pendekatan saintifik; (3) peserta didik menunjukkan sikap positif terhadap model pembelajaran *Advance Organizer* melalui pendekatan saintifik dan model pembelajaran *Advance Organizer* melalui pendekatan konstruktivisme.

Kata Kunci: *advance organizer*, saintifik, konstruktivisme, representasi, pemahaman, sikap belajar.

## ABSTRACT

**Yusep Heri Agustian, (2021).** “Advance Organizer Learning Model With Scientific Approach and Constructivism Approach For Increasing Mathematical Representation Skills, Mathematical Comprehension, and Student Attitudes”.

This study aims to examine the improvement in mathematical representation skills, mathematical comprehension, and student attitudes by applying the Advance Organizer learning model with scientific approach and constructivism approach.

The study used mix method with the quasi experiment to the design of the control group pretest and posttest design. The population is all students of SMKN Manonjaya 2020/2021 school year. Samples have been taken randomly technique, obtained students of class X TKJ 1 as an experimental class 1, obtained students of class X TKJ 2 as an experimental class 2 and class X TKJ 3 as a control class. The instrument consists of tests and non-tests. The test is a matter of mathematical representation skills and a matter of mathematical comprehension. Non-test instrument in the form of attitude observation sheet. Analysis performed by one ways Anova, F-test, and N-Gain. The results of the study concluded that:(1) the improvement of students' mathematical representation skills with the application of the Advance Organizer learning model with constructivism approach was better than those applying the application of the Advance Organizer learning model with scientific approach and applying the application of the Discovery Learning learning model with scientific approach; (2) the improvement of students' mathematical comprehension skills with the application of the Advance Organizer learning model with scientific approach was better than those applying the application of the Advance Organizer learning model with constructivism approach and applying the application of the Discovery Learning learning model with scientific approach;(3) students' show a positive attitudes with the application of the Advance Organizer learning model with scientific approach and the application of the Advance Organizer learning model with constructivism approach.

**Keywords:** advance organizer, scientific, constructivism, representation, comprehension, and student attitudes.