

ABSTRAK

Michael Justine Tampubolon: Pengembangan Bahan Ajar Fisika dengan Model *Guided Inquiry* untuk Meningkatkan Keterampilan Berpikir Kreatif dan Berpikir Kritis Siswa SMA. Tesis. Medan :Magister Pendidikan Fisika, Universitas Negeri Medan 2019.

Penelitian ini bertujuan mengembangkan sebuah bahan ajar berbasis *guided inquiry* untuk melihat peningkatan aktifitas belajar siswa dan sekaligus meningkatkan keterampilan berpikir kreatif dan keterampilan berpikir kritis siswa. Jenis penelitian ini adalah *Research & Development (R&D)*. Penelitian ini dimulai dari studi pendahuluan, analisis kebutuhan siswa, studi literatur, dan observasi lapangan. Penelitian dilanjutkan dengan mendesain sebuah bahan ajar berbasis *guided inquiry*. Bahan ajar yang dikembangkan disusun sesuai dengan fase-fase dalam *guided inquiry*. Bahan ajar kemudian dinilai oleh validator ahli materi dan ahli desain. Bahan ajar juga dinilai oleh guru sekolah dan diuji cobakan pada siswa. Indikator-indikator penilaian bahan ajar dikembangkan sesuai dengan indikator-indikator keterampilan berpikir kreatif dan keterampilan berpikir kritis. Hasil penelitian menunjukkan bahan ajar yang dikembangkan valid dan layak digunakan berdasarkan kategori penilaian sangat baik oleh validator dengan persentase skor 89,5% oleh ahli materi dan 95,20% oleh ahli desain; oleh guru dengan persentase 90% (Responden 1) dan 88,75% (Responden 2). Bahan ajar juga telah efisien, yang terlihat dari peningkatan keterampilan berpikir kreatif dan berpikir kritis siswa dengan analisis N-gain pada kategori sedang. Berdasarkan uraian tersebut maka bahan ajar yang dikembangkan berbasis *guided inquiry* telah valid, praktis dan efisien sehingga mampu meningkatkan keterampilan berpikir kreatif dan berpikir kritis siswa. Selain itu, siswa juga mengalami peningkatan dalam aktifitas belajar.

Kata kunci : Penelitian R&D, *guided inquiry*, keterampilan berpikir kreatif, keterampilan berpikir kritis

ABSTRACT

Michael Justine Tampubolon: The Development of Physics Teaching Materials with Guided Inquiry Model's to Improve Creative Thinking Skills and Critical Thinking Skills in High School Students. Thesis. Medan: Postgraduate School of Physic Education of State University of Medan 2019.

This study aims to develop a teaching materials based on guided inquiry to see the improvement of student learning activities and at the same time improve creative thinking skills and critical thinking skills of students. This type of research is Research & Development (R & D). This research starts from a preliminary study, analysis of student needs, literature studies, and school observations. The research was continued by designing a physics teaching materials based on guided inquiry. Developed teaching materials are arranged according to the inner phases of guided inquiry. The instructional materials were then assessed by an expert of teaching materials and an expert of design. The teaching materials were also assessed by the school teacher and tested on students. The indicators of teaching material assessment were developed in accordance with the indicators of creative thinking skills and critical thinking skills. The teaching materials that developed and used are valid based on the category of very good assessment by the expert with a percentage score of 89.5% by material experts and 95.20% by design experts, by teachers with a percentage of 90% (Respondents 1) and 88.75% (Respondent 2). Teaching materials have also been efficient, which can be seen from increased skills creative thinking and critical thinking of students with N-gain analysis in the medium category. Based on the description, the teaching materials developed based on guided inquiry are valid, practical and efficient so that they can improve students' creative thinking and critical thinking skills. In addition, students also experience an increase in learning activities.

Keywords: *R & D research, guided inquiry, creative thinking skills, critical thinking skills*