

ABSTRAK

Liaupati, Leonardo Amaris. 2023. Analisis Perbandingan Salah Satu Buku Teks Matematika Indonesia dan Malaysia pada Materi Persamaan Garis Lurus dalam Aspek Level Kognitif, Jenis Kemampuan Kognitif, dan Lintasan Belajar. Skripsi. Program Studi Pendidikan Matematika, Jurusan Matematika dan Ilmu Pengetahuan Alam, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Sanata Dharma.

Tujuan dari penelitian ini adalah menganalisis dan membandingkan level kognitif dan jenis kemampuan kognitif pada soal dan contoh soal serta lintasan belajar dalam buku teks matematika Indonesia dan Malaysia. Buku teks yang dimaksud adalah bab 4 pada buku Matematika Untuk SMP/MTs Kelas VIII Semester I terbitan Kementerian Pendidikan dan Kebudayaan Indonesia edisi revisi 2017, bab 10 pada buku Mathematics Form 2 terbitan 2017, dan bab 9 pada buku Mathematics Form 3 terbitan 2019. Buku teks Mathematics Form adalah terbitan Kementerian Pendidikan Malaysia.

Jenis penelitian ini adalah analisis konten. Pengumpulan data dilakukan dengan membaca, memilah, mengelompokkan, dan mencatat isi buku teks. Data dianalisis secara deskriptif kualitatif kecuali dalam aspek level kognitif dan jenis kemampuan kognitif, data juga dianalisis secara deskriptif kuantitatif.

Hasil penelitian ini adalah buku Indonesia memiliki total persentase lebih tinggi daripada buku Malaysia pada contoh soal dan soal berlevel kognitif tinggi. Buku Malaysia memiliki persentase lebih tinggi daripada buku Indonesia pada contoh soal dan soal berlevel kognitif rendah. Buku Indonesia memiliki lebih banyak unit analisis daripada buku Malaysia pada setiap kompetensi kecuali kompetensi pemodelan matematis dan kompetensi simbol dan formalisme matematis. Urutan topik pada lintasan belajar buku Indonesia adalah menggambar grafik, gradien konteks luar, gradien, menentukan persamaan garis, gradien konteks luar, gradien, menentukan persamaan garis, dan kedudukan dua garis. Urutan topik pada lintasan belajar buku Malaysia adalah gradien konteks luar, gradien, gradien konteks luar, gradien, gradien konteks luar, gradien, bentuk-bentuk persamaan garis, kedudukan titik dan garis, kedudukan dua garis, menentukan persamaan garis, kedudukan dua garis, dan penyelesaian masalah.

Kata Kunci: buku teks matematika, Indonesia, Malaysia, persamaan garis lurus, level kognitif, jenis kemampuan kognitif, lintasan belajar.

ABSTRACT

Liaupati, Leonardo Amaris. 2023. *Comparative Analysis of One of the Indonesian and Malaysian Mathematics Textbooks on Straight Line Equations Contents in the Aspects of Cognitive Levels, Types of Cognitive Abilities, and Learning Trajectories*. Undergraduate Thesis. Mathematics Education Study Program. Department of Mathematics and Science Education. Faculty of Teacher Training and Education. Sanata Dharma University.

This study aimed to analyze and compare cognitive levels and types of cognitive abilities in problems and worked examples as well as learning trajectories in Indonesian and Malaysian mathematics textbooks. The textbooks were Chapter 4 in Mathematics For Junior High School/MTs 8th Grade First Semester textbook published by the Indonesian Ministry of Education and Culture in the 2017 revised edition, Chapter 10 in Mathematics Form 2 textbook published in 2017, and Chapter 9 in Mathematics Form 3 textbook published in 2019. The Mathematics Form textbooks were published by the Malaysian Ministry of Education.

The type of this research is content analysis. Data collection was done by reading, sorting, classifying, and recording the contents of textbooks. Data were analyzed qualitatively descriptive except in the aspects of cognitive levels and types of cognitive abilities, the data were also analyzed quantitatively descriptive.

The results of this study were that Indonesian textbook has higher total percentages of high cognitive level worked examples and problems than Malaysian textbooks. Malaysian textbooks have higher percentages of low cognitive level worked examples and problems than Indonesian textbook. Indonesian textbook has more units of analysis than Malaysian textbooks in all competencies except mathematical modeling competency and mathematical symbols and formalism competency. The sequence of topics in the learning trajectory of Indonesian textbook is drawing graphics, outer context gradients, gradients, determining line equations, outer context gradients, gradients, determining line equations, and the position of two lines. The sequence of topics in the learning trajectory of the Malaysian textbooks is outer context gradients, gradients, outer context gradients, gradients, outer context gradients, gradients, forms of equations of lines, the position of points and lines, the position of two lines, determining line equations, the position of two lines, and problem solving.

Keywords: *mathematics textbook, Indonesia, Malaysia, straight line equations, cognitive levels, types of cognitive abilities, learning trajectories*