

## ABSTRAK

**JHONAS DONGORAN, NIM. 8136173010.** “Analisis Butir Soal Ujian Nasional SMP dan Soal *PISA* pada Konten Pengetahuan Biologi Berdasarkan Taksonomi Bloom Dua Dimensi”. Tesis. Medan: Program Studi Pendidikan Biologi Pascasarjana Unimed, 2015.

Penelitian ini dilakukan untuk menganalisis butir soal *UN* SMP mata pelajaran IPA TA. 2011/2012, TA. 2012/2013, dan TA. 2013/2014 dan soal literasi sains *PISA* yang dipublikasikan oleh OECD dalam *Take The Test: Sample questions from PISA publication* pada tahun 2009 pada konten pengetahuan Biologi berdasarkan taksonomi Bloom dua dimensi. Penelitian ini bertujuan untuk mengetahui: (1) jumlah dan persentase soal tertinggi dan terendah pada soal *UN* berdasarkan Kompetensi pada kisi-kisi ujian nasional, (2) persentase peta kognitif soal *UN* berdasarkan taksonomi Bloom dua dimensi, (3) persentase peta kognitif soal literasi sains *PISA* berdasarkan taksonomi Bloom dua dimensi, dan (4) perbandingan persentase level soal *UN* SMP dengan soal literasi sains *PISA* pada konten pengetahuan Biologi berdasarkan taksonomi Bloom dua dimensi. Metode yang digunakan dalam penelitian ini adalah metode deskriptif. Berdasarkan hasil analisis, ditemukan bahwa: (1) jumlah dan persentase soal tertinggi terdapat pada Kompetensi 12 yang masing-masing terdiri dari 6 butir soal dengan persentase 33,3%, 35,3%, dan 35,3%. Sedangkan jumlah dan persentase soal terendah terdapat pada Kompetensi 10 yang masing-masing terdiri dari 2 butir soal dengan persentase 11,1%, 11,8%, dan 11,8%, (2) berdasarkan dimensi kognitif pada soal *UN* TA. 2011/2012, TA. 2012/2013, dan TA. 2013/2014 berturut-turut terdiri dari C1 (5,56%, 23,53%, 5,89%), C2 (55,56%, 41,17%, 52,94%), C3 (5,56%, 17,65%, 23,53%), C4 (33,32%, 17,65%, 17,64%). Berdasarkan dimensi pengetahuan, soal *UN* TA. 2011/2012, TA. 2012/2013, dan TA. 2013/2014 berturut-turut terdiri dari pengetahuan faktual (27,78%, 58,82%, 64,71%), konseptual (55,56%, 29,41%, 23,53%), prosedural (16,65%, 11,77%, 11,76%), (3) berdasarkan dimensi kognitif pada soal literasi sains *PISA* berturut-turut terdiri dari C2 (33,85%), C3 (6,16%), C4 (41,54%), C5 (15,38%), dan C6 (3,07%). Berdasarkan dimensi pengetahuan, soal literasi sains *PISA* berturut-turut terdiri dari pengetahuan faktual (10,77%), konseptual (46,15%), prosedural (21,54%), dan meta-kognitif (21,54%), (4) perbandingan level soal *UN* dan soal *PISA* berdasarkan dimensi kognitif berturut-turut terdiri dari C1 (11,54% : 0%), C2 (50,00% : 33,85%), C3 (15,39% : 6,16%), C4 (23,07% : 41,54%), C5 (0% : 15,38%), C6 (0% : 3,07%). Berdasarkan dimensi pengetahuan, soal *UN* dan soal *PISA* berturut-turut terdiri dari faktual (50,00% : 10,77%), konseptual (36,54% : 46,15%), prosedural (13,46% : 21,54%), dan meta-kognitif (0% : 21,54%). Penelitian ini hanya menganalisis soal *UN* dan soal *PISA* berdasarkan taksonomi Bloom dua dimensi sehingga perlu dikembangkan secara lebih luas ditinjau dari aspek yang lain.

**Kata Kunci :** Analisis, Ujian Nasional, Kisi-Kisi *UN*, *PISA*, Taksonomi Bloom Dua Dimensi

## ABSTRACT

**JHONAS DONGORAN. NIM. 8136173010.** “The Analysis of Junior High school National Examination Question and *PISA* question in the Content of Biology Based on New Bloom Taxonomy Two Dimension”. A Thesis. Medan. Biology Education Study Program, Postgraduate School State University of Medan. 2015

This research was performed to analyze the science question in National Examination for junior high school academic year 2011/2012, 2012/2013, 2013/2014 and the literacy science question from *PISA* publication in Take the Test: Sample Question from OECD *PISA* Assessment in the content Biology based on New Bloom Taxonomy Two Dimension. This research were aims to: (1) investigate the number and percentage of national examination question based on the competence of national examination blueprint; (2) the percentage of cognitive maps of national examination questions based on bloom new taxonomy two dimension; (3) the percentage of cognitive maps of *PISA* questions on bloom new taxonomy two dimension; and (4) the percentage comparison of national examination and *PISA* questions based on bloom new taxonomy two dimension. The method used in this study was descriptive. The result showed: (1) the highest number and percentage of national examination questions were in competence 12 which composed of 6 question of each percentage 33.3%, 35.3%, and 35.3%, while the lowest number and percentage were in competence 10 which composed of two questions of each source with percentage 11.1%, 11.8%, and 11.8%; (2) Based on cognitive level, the percentage of National Examination question in academic year 2011/2012, 2012/2013, 2013/2014 were respectively C1 (5.5.6%, 23.53%, and 5.89%), C2 (55.56%, 41.17%, and 52.94%), C3 (5.56%, 17.65%, 23.53%), and C4 (33.32%, 17.65%, and 17.64%); (3) Based on cognitive level, the percentage of *PISA* question were respectively C2 (33.85%), C3 (6.16%), C4 (41.54%), C5 (15.38%), and C6 (3.07%). Based on knowledge dimension were factual knowledge (10.77%), conceptual knowledge (46.15%), procedural knowledge (21.54%), and Metacognitive knowledge (21.54%); (4) the comparison of national examination question and *PISA* question were C1 (11.54%:0%), C2 (50%:33.85%), C3 (15.39% : 6.16%), C4 (23.07% : 41.54%), C5 (0% : 15.38%) and C6 (0 % : 3.07%). The comparison based on knowledge dimension were factual knowledge (50% : 10.77%), conceptual knowledge (36.54% : 46.15%), procedural knowledge (13.46% : 21.54%), and metacognitive (0 % : 21.54%). This research was only analyzed the questions based on new bloom taxonomy two dimension, and it provide chance to develop the research based on another aspects.

**Keywords:** *Analysis, National Examination, national examination blueprint, PISA, New Bloom Taxonomy two dimension.*