

## ABSTRAK

Sutiono. 2014. Kajian Representasi Visual “*Mental Imagery*” Siswa sebagai Media untuk Mengevaluasi Pemahaman IPA Terpadu Siswa SMP di Gorontalo. Skripsi. Program Studi Pendidikan Kimia, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Gorontalo. Pembimbing I Dr. Lukman A.R. Laliyo, M.Pd, MM dan Pembimbing II Julhim S. Tangio, S.Pd, M.Pd.

Penelitian ini bermaksud untuk mendeskripsikan representasi visual “*mental imagery*” siswa sebagai media untuk mengevaluasi pemahaman IPA Terpadu siswa SMP di Gorontalo terutama pada materi suhu beserta pengukurannya dan perubahan wujud zat. Subyek penelitian ini di SMP Negeri 7 Satap Kwandang. Pendekatan yang digunakan adalah kualitatif dengan jenis penelitian fenomenologis. Peneliti bertindak sebagai instrument utama dan pengamat penuh. Data diambil dari hasil *visual image* siswa, tes tertulis, dan hasil wawancara. Sumber data diambil dari 47 orang siswa yang terdiri dari 24 siswa Kelas VII dan 23 siswa Kelas VIII. Teknik penarikan sampel menggunakan *purposive sampling*. Teknik analisis data menggunakan model interaktif dari Miles dan Huberman.

Hasil penelitian menunjukkan adanya kecenderungan dari hasil *visual image* siswa yang mengandung kesalahan pemahaman, tingkat pemahaman terhadap materi yang diajarkan, dan pengaruh pengamatan/perilaku lingkungan terhadap hasil *visual image*. Hal ini membuktikan bahwa dengan *visual image* siswa mampu menjadi media evaluasi pemahaman siswa terhadap materi IPA Terpadu. Pada pilihan topik suhu dan pengukurannya, dari 19 hasil *visual image* siswa terdapat kecenderungan siswa mengalami kesalahan pemahaman 1 orang (5,26%), tingkat pemahaman siswa 13 orang (68,42%), dan pengaruh pengamatan/perilaku lingkungan 5 orang (26,32%). Sedangkan pada pilihan topik perubahan wujud zat, dari 28 hasil *visual image* siswa terdapat kecenderungan siswa yang mengalami kesalahan pemahaman 2 orang (7,14%), tingkat pemahaman siswa 12 orang (42,86%), dan pengaruh pengamatan/perilaku lingkungan 14 orang (50%). Berdasarkan penelitian tersebut disarankan: (1) “*Visual image*” siswa hendaknya dijadikan oleh seorang guru sebagai salah satu media evaluasi dalam pembelajaran sains yang sifatnya sangat abstrak; (2) seorang guru dalam membelajarkan materi IPA harus disesuaikan dengan realita kehidupan siswa; (3) perlu dilakukan penelitian yang lebih lanjut tentang desain gambar dari *visual image* siswa terhadap kemampuan kognitif anak dalam memahami materi dan keahlian dalam menggambar.

**Kata Kunci:** *Mental Imagery*, *visual image*, representasi, pemahaman, dan IPA Terpadu

## ABSTRACT

Sutiono. 2014. Visual Representation Study of Student's "*Mental Imagery*" as Media to Evaluate the Intergrate Natural Sciences at SMP in Gorontalo. Skripsi. Study Program of Chemistry Education, Faculty of Mathematics and Natural Sciences, Universitas Negeri Gorontalo. The principal supervisor was Dr. Lukman A.R. Laliyo, M.Pd, MM and co-supervisor was Julhim S. Tangio, S.Pd, M.Pd.

The research aimed to describe the visual representation of "*mental imagery*" as media to evaluate the Integrated Natural Science at SMP in Gorontalo especially for the temperature and its measurement and changes in states of matter material. The subject of research was the SMP Negeri 7 Satap of Kwandang. The research applied qualitative approach by having phenomenological research type. The researcher acted as the main instrument and full observer. The data were collected through the result of students' *visual images*, written test and interview. The sources of data were 47 students consisted of 24 students of class VII and 23 students of class VIII. The technique of sampling was *purposive sampling*. The data were analyzed by using interactive model of Miles and Huberman.

The results of research showed that there was a tendency of students' *visual image* result which contained the miss understanding, the level material understanding, and the influence of environment observation /behavior toward the *visual image*. This proved that the students' *visual image* can be a media to evaluate the students' understanding of Integrated Natural Sciences material. For the temperature and its measurement topic, from 19 results of students' *visual image*, there was 1 student (5.26%) who had tendency of miss understanding, the level of students' understanding was 13 students (68.42%), and the influence of enviroment observation/behavior was 5 students (26.32%). For the change in states of matter topic, from 28 results of students' *visual image*, there was 2 student (7.14%) who had tendency of miss understanding, the level of students' understanding was 12 students (42.82%), and the influence of enviroment observation/behavior was 14 students (50%). Based on the research, it is suggested (1) students' "*visual image*" should be an evaluation media in Sciences learning which highly abstract; (2) a teacher, in teaching natural Sciences material, should adjust to the reality of students' live; (3) it should be conducted the further research of picture design of *visual image* of students toward the students' cognitive ability in understanding material and skills in drawing.

**Keywords:** *Mental imagery*, *visual image*, representations, understanding, and Integrated Natural Sciences.

