

## ABSTRACT

Asteria Ratna Widiastuti (01669180059)

### **THE EFFECTIVENESS OF INDEPENDENCY AND STUDENT-TEACHER INTERACTION THROUGH THE FLIPPED CLASSROOM ON THE RESULTS OF COGNITIVE LEARNING OUTCOME IN SCIENCE OF PRIMARY V LEVEL PENABUR JAKARTA**

(xv + 144 pages; 7 figures; 42 tables; 22 appendixes)

The material of Human Circulatory System is the Science material that is considered the most difficult to understand by grade V Elementary of PENABUR Jakarta students. For teachers, this material is also quite difficult to convey to students. The limitations of learning time and learning outcomes for this material, which are relatively lower each year than other materials, are some of the things that become the background for this research. One of the effects of learning conditions during the Covid-19 pandemic was the reduced interaction between students and teachers. This can affect the achievement of student learning outcomes. On the other hand, pandemic conditions provide opportunities for students and teachers to explore digital learning media. Student independence is needed so that learning objectives can be achieved. The Flipped Classroom learning model facilitates independent (asynchronous) learning for the LOTS cognitive domain, and face-to-virtual (synchronous) learning for the HOTS cognitive domain. This study aims to provide an overview of the effectiveness of the application of the Flipped Classroom learning model in Science learning for grade V at the PENABUR Jakarta Elementary level. The research procedure followed the design type The Non-equivalent Control Group Design in the Quasi Experiment research. The population in this study included all students in grade V SD PENABUR Jakarta. The target population taken are SDK 9 PENABUR with 42 students and SDK 3 PENABUR with 50 students. Data collection techniques by interview, documentation, observation, and questionnaires. The results showed that the Flipped Classroom learning model strengthened the influence of student independence by 0.097, student-teacher interaction by 0.66, and student-teacher independence and interaction simultaneously by 0.70 on cognitive learning outcomes. The NGain test result for the Flipped Classroom was 49.60% and the conventional model was 33.27%. There is a difference in the average pretest and cognitive learning outcomes in the two learning models. There is also a significant difference between cognitive learning outcomes using Flipped Classroom and conventional models. The Flipped Classroom model is less effective for improving cognitive learning outcomes in Science subject content for grade V Elementary on Human Circulatory System material.

**Key Words:** Flipped Classroom, Independency, Student-Teacher Interaction, Cognitive Learning Outcome

**References:** 51 (1995 – 2020)

## ABSTRAK

Asteria Ratna Widihastuti (01669180059)

### **EFEKTIVITAS KEMANDIRIAN DAN INTERAKSI SISWA DENGAN GURU MELALUI *FLIPPED CLASSROOM* TERHADAP HASIL BELAJAR KOGNITIF IPA KELAS V JENJANG SD PENABUR JAKARTA**

(xv + 144 halaman; 7 gambar; 42 Tabel; 22 lampiran)

Materi Sistem Peredaran Darah pada Manusia merupakan materi IPA yang dianggap paling sulit dipahami siswa kelas V SD PENABUR Jakarta. Bagi guru, materi ini juga cukup sulit disampaikan ke siswa. Keterbatasan waktu belajar dan hasil belajar untuk materi ini yang setiap tahun relatif lebih rendah dari materi yang lain, merupakan beberapa hal yang menjadi latar belakang bagi penelitian ini. Salah satu dampak kondisi pembelajaran pada masa pandemi Covid-19 adalah tereduksinya interaksi siswa dan guru. Hal ini dapat memengaruhi pencapaian hasil belajar siswa. Di sisi lain, kondisi pandemi memberikan peluang bagi siswa dan guru mengeksplorasi media belajar digital. Dibutuhkan kemandirian siswa agar tujuan pembelajaran dapat tercapai. Model pembelajaran *Flipped Classroom* memfasilitasi pembelajaran mandiri (*asynchronous*) untuk ranah kognitif LOTS, dan pembelajaran tatap maya (*synchronous*) untuk ranah kognitif HOTS. Penelitian ini bertujuan untuk memberikan gambaran efektivitas penerapan model pembelajaran *Flipped Classroom* dalam pembelajaran IPA kelas V jenjang SD PENABUR Jakarta. Prosedur penelitian mengikuti rancangan tipe *The Nonequivalent Control Group Design* pada penelitian *Quasi Experiment*. Populasi pada penelitian ini meliputi seluruh siswa kelas V Jenjang SD PENABUR Jakarta. Populasi target yang diambil adalah SDK 9 PENABUR sejumlah 42 siswa dan SDK 3 PENABUR sejumlah 50 siswa. Teknik pengumpulan data dengan wawancara, dokumentasi, observasi, dan kuesioner. Hasil penelitian menunjukkan bahwa model pembelajaran *Flipped Classroom* menguatkan pengaruh kemandirian siswa sebesar 0,097, interaksi siswa dan guru sebesar 0,66, dan kemandirian serta interaksi siswa-guru secara bersamaan sebesar 0,70 terhadap hasil belajar kognitif. Hasil Uji N-Gain untuk model *Flipped Classroom* sebesar 49,60% dan model konvensional sebesar 33,27%. Terdapat beda rata-rata pretest dan hasil belajar kognitif pada kedua model pembelajaran. Terdapat beda nyata antara hasil belajar kognitif menggunakan *Flipped Classroom* dan model konvensional. Model *Flipped Classroom* kurang efektif untuk meningkatkan hasil belajar kognitif pada muatan pelajaran IPA kelas V SD materi Sistem Peredaran Darah Manusia.

Kata Kunci: *Flipped Classroom*, Kemandirian, Interaksi Siswa-Guru, Hasil Belajar Kognitif

Referensi: 51 (1995 – 2020)