

ABSTRAK

Pandemi yang terjadi membuat seluruh dunia menerima dampak *negative* yang dihasilkan, terutama dalam dunia pendidikan. Dengan memanfaatkan teknologi yang semakin maju dan berkembang saat ini, maka metode pembelajaran pun semakin berkembang. Permasalahan yang dihadapi pihak sekolah adalah kurang bisa menentukan model pembelajaran mana yang paling efektif agar dapat mengembangkan metode pembelajaran yang lebih baik bagi siswa. Tujuan penelitian ini adalah melakukan perbandingan model pembelajaran offline, online dan blended untuk mengetahui metode pembelajaran yang efektif berdasarkan nilai mata pelajaran hasil belajar siswa menggunakan algoritma hierarchial clustering. Hasil penelitian mendapatkan bahwa hasil pembelajaran blended merupakan pembelajaran yang paling dimengerti oleh siswa dibandingkan model pembelajaran offline dan online yang dilihat dari hasil jumlah cluster nilai rata-rata siswa dalam kategori baik sebanyak 290 siswa dan mengalami penurunan menjadi 219 siswa dan kenaikan yang drastis sebanyak 362 siswa pada saat penerapan pembelajaran blended. Sedangkan Mata pelajaran yang dapat dipahami oleh siswa dengan penerapan model pembelajaran offline, online dan blended adalah mata pelajaran Agama, Matematika dan IPA.

Kata Kunci: Offline Learning, Online Learning, Blended Learning, Algoritma
Hierarchical Clustering

ABSTRACT

The pandemic that has occurred has made the whole world accept the negative impacts it has, especially in the world of education. By utilizing technology that is increasingly advanced and developing at this time, the learning method is also growing. The problem faced by the school is that it is unable to determine which learning model is the most effective in order to develop better learning methods for students. The purpose of this study is to compare offline, online and blended learning models to determine effective learning methods based on student learning outcomes using a hierarchical clustering algorithm. The results of the study found that blended learning outcomes were the most understood learning by students compared to offline and online learning models which were seen from the results of the number of clusters the average value of students in the good category was 290 students and decreased to 219 students and a drastic increase of 362 students. at the time of the application of blended learning. While the subjects that can be understood by students with the application of offline, online and blended learning models are the subjects of Religion, Mathematics and Science.

Keywords: Offline Learning, Online Learning, Blended Learning,
Hierarchical Clustering Algorithm