

Abstrak

Penelitian ini bertujuan untuk mengkaji keefektifan dan efisiensi model pembelajaran akuntansi serta materi pembelajaran yang didasarkan pada *Cognitive Load Theory* (CLT). Secara khusus, penelitian ini menelaah pengaruh gamifikasi dan persamaan akuntansi berbasis dana terhadap keefektifan dan efisiensi pembelajaran mekanisme debit-kredit dan penjumlahan. Desain eksperimen faktorial *between-subjects* 2x2 melibatkan 149 partisipan yang selanjutnya data dianalisis dengan *Multivariate Analysis of Variance* (MANOVA), yang didahului oleh uji normalitas multivariat dan homogenitas matriks kovarians, serta uji perbedaan rerata. Hasil penelitian menunjukkan bahwa model pembelajaran berbasis gamifikasi lebih efektif dibandingkan dengan model berbasis masalah, serta lebih efisien dalam menurunkan *Extraneous Cognitive Load* dan meningkatkan *Germane Cognitive Load*, meskipun tidak lebih efisien dalam menurunkan *Intrinsic Cognitive Load*. Materi pembelajaran berbasis akuntansi dana terbukti lebih efektif dan lebih efisien dalam menurunkan *Intrinsic Cognitive Load*, meskipun tidak lebih efisien dalam menurunkan *Extraneous Cognitive Load* dibandingkan dengan materi berbasis aset. Lebih lanjut, kombinasi gamifikasi dengan materi berbasis dana terbukti lebih efektif dan lebih efisien dalam menurunkan *Intrinsic* dan *Extraneous Cognitive Load* serta meningkatkan *Germane Cognitive Load* dibandingkan dengan kombinasi model berbasis masalah dan materi berbasis aset.

Kata Kunci: Gamifikasi, *Problem-Based Learning*, *Cognitive Load Theory*, Persamaan Akuntansi, Keefektifan, Efisiensi

Abstract

This study aims to examine the effectiveness and efficiency of accounting instructional models and learning materials based on Cognitive Load Theory (CLT). Specifically, it investigates the effects of gamification and fund-based accounting equations on the effectiveness and efficiency of learning the debit-credit mechanism and journalizing. Using a 2x2 between-subjects factorial experimental design involving 149 participants, data were analyzed through Multivariate Analysis of Variance (MANOVA), preceded by multivariate normality and homogeneity of covariance matrix tests, as well as mean difference tests. The results indicate that the gamification instructional model is more effective than the problem-based model and more efficient in reducing Extraneous Cognitive Load and increasing Germane Cognitive Load, though not more efficient in reducing Intrinsic Cognitive Load. Learning materials based on fund accounting principles are more effective and more efficient in reducing Intrinsic Cognitive Load, though not more efficient in reducing Extraneous Cognitive Load compared to asset-based materials. Furthermore, the combination of gamification with fund-based materials is both more effective and more efficient in reducing Intrinsic and Extraneous Cognitive Load and increasing Germane Cognitive Load than the problem-based model with asset-based materials.

Keywords: *Gamification, Problem-Based Learning, Cognitive Load Theory, Accounting Equation, Effectiveness, Efficiency*