

## ABSTRAK

Penelitian ini bermaksud untuk membandingkan kemampuan berpikir interdisiplin siswa pada kelas eksperimen melalui pembelajaran terhubung dengan kerangka instruksional berbasis dimensi belajar dan siswa kelas kontrol dengan pembelajaran terhubung. Kemampuan berpikir interdisiplin dijabarkan dalam tiga komponen, yaitu *disciplinary grounding*, *advancement through integration*, dan *critical awareness*. Penyajian materi secara terhubung diaplikasikan dalam pembelajaran sistem ekskresi baik pada kelas eksperimen maupun kelas kontrol. Pengumpulan data dilakukan selama empat pertemuan dengan desain penelitian *Pretest-Posttest Non-randomized and Unequivalent Control Group Design* untuk memperoleh pemahaman tentang kemampuan berpikir interdisiplin siswa. Dua kelas dari SMAN 24 Bandung diambil secara purposif sebagai partisipan pada penelitian ini. Instrumen berupa soal pilihan ganda dan uraian yang dibuat berdasarkan indikator proses berpikir kompleks diberikan pada saat prates dan pascates. Sementara angket sistematik diferensial dan wawancara dilakukan setelah pembelajaran pada pertemuan keempat. Analisis data menunjukkan bahwa pembelajaran terhubung dengan kerangka berbasis dimensi belajar memunculkan kemampuan berpikir interdisiplin siswa terutama pada komponen *critical awareness* siswa pada kategori n-gain ‘sedang’. Sementara komponen *advancement through integration* dan *disciplinary grounding* siswa tidak berbeda signifikan antara kelas eksperimen dan kontrol. Hal ini menunjukkan bahwa kemampuan integrasi siswa belum berkembang dan memberi implikasi bahwa siswa baru mencapai kategori berpikir multidisiplin karena ‘pengintegrasian’ sebagai kunci belajar interdisiplin belum menunjang pemahaman interdisipliner siswa dan termasuk dalam kategori n-gain sedang. Analisis korelasi menunjukkan bahwa tidak terdapat hubungan signifikan antarkomponen kemampuan berpikir interdisiplin siswa.

**Kata kunci:** kemampuan berpikir interdisiplin, pembelajaran terhubung, dimensi belajar

## ABSTRACT

This research intends to compare students' interdisciplinary thinking skill on connected teaching using instructional framework based on learning dimensions in experiment class and only connected teaching in control class. Interdisciplinary thinking skill is explained in three components, they are disciplinary grounding, advancement through integration, and critical awareness. Collecting data was conducted for four meetings with *Pretest-Posttest Nonrandomized and Nonequivalent Control Group Design* to acquire understanding about how students' interdisciplinary thinking skill. Two classes of SMAN 24 Bandung were taken purposefully as participants in this research. Instruments in the form of multiple choice and essay question were made based on indicators of complex thinking skill given in pretest and posttest. Meanwhile, differential systematic questionnaire and interviews were conducted after forth meeting has done. Data analysis shows that connected learning using instructional framework based on learning dimensions enhanced students' interdisciplinary thinking skill especially in the component of students' critical awareness in the category 'middle' n-gain. While, advancement through integration and disciplinary grounding skill are not significantly different between experiment class and control class. It shows that students' integrating skill were not adequate yet and implies that student just achieve multidisciplinary thinking category because 'integration' as the key of interdisciplinary learning is still inadequate for develop interdisciplinary understanding and it still in the category 'middle' n-gain. Correlation analysis shows that there is no significant correlation among components of students' interdisciplinary thinking skill.

**Keywords:** interdisciplinary thinking skill, connected teaching, dimensions of learning