

**PENERAPAN PEMBELAJARAN *COLABORATIVE PROBLEM SOLVING*  
BERBANTUAN *MIND MAP* UNTUK MENINGKATKAN KEMAMPUAN  
PEMECAHAN MASALAH DAN KOMUNIKASI SISWA SMP PADA MATERI  
*GLOBAL WARMING***

Tata Koswara, NIM 1602971,  
Pembimbing Pertama: Dr. Muslim, M.Pd.,  
Pembimbing Kedua: Dr. Yayan Sanjaya, M.Si.,  
Program Studi Pendidikan IPA  
Sekolah Pascasarjana UPI Bandung Tahun 2018

**ABSTRAK**

Kemampuan pemecahan masalah dan komunikasi siswa merupakan salah satu kemampuan tuntutan pembelajaran Abad 21. Penelitian ini bertujuan untuk mendapat gambaran tentang peningkatan kemampuan pemecahan masalah dan komunikasi antara siswa yang mendapatkan pembelajaran *colaborative problem solving* berbantuan *mind map* dengan siswa yang hanya mendapatkan pembelajaran *colaborative problem solving*. Metode yang digunakan dalam penelitian ini adalah eksperimen semu dengan desain *the matching-only pretest-posttest control group design*. Populasi penelitian adalah seluruh siswa kelas VII pada salah satu SMP di Kota Bandung. Sampel sebanyak dua kelas yang dipilih secara *random*. Instrumen penelitian meliputi soal tes kemampuan pemecahan masalah, soal tes kemampuan komunikasi tulisan, dan lembar observasi keterlaksanaan pembelajaran dan kemampuan komunikasi lisan. Hasil penelitian menunjukkan peningkatan kemampuan pemecahan masalah pada kelas yang mendapat pembelajaran *colaborative problem solving* berbantuan *mind map* dengan perolehan skor rata-rata gain yang dinormalisasi  $\langle g \rangle$  sebesar 0,66 dan pada kelas yang hanya mendapat pembelajaran *colaborative problem solving* sebesar 0,49 berada pada kategori sedang. Peningkatan kemampuan komunikasi tulisan pada kelas yang mendapat pembelajaran *colaborative problem solving* berbantuan *mind map* dengan perolehan skor rata-rata gain yang dinormalisasi  $\langle g \rangle$  sebesar 0,66 dan pada kelas yang hanya mendapat pembelajaran *colaborative problem solving* sebesar 0,46 berada pada kategori sedang. Capaian kemampuan komunikasi lisan siswa yang mendapat pembelajaran *colaborative problem solving* berbantuan *mind map* dan siswa yang hanya mendapat pembelajaran *colaborative problem solving* sebesar 88,48% berada pada kategori tinggi. Berdasarkan uji beda rata-rata pada taraf kepercayaan 95%, dapat disimpulkan bahwa penerapan model pembelajaran *colaborative problem solving* berbantuan *mind map* secara signifikan dapat lebih meningkatkan kemampuan pemecahan masalah dan komunikasi tulisan dari pada model pembelajaran *colaborative problem solving*.

Kata kunci: *pembelajaran colaborative problem solving, mind map, kemampuan pemecahan masalah dan kemampuan komunikasi.*

Tata Koswara, 2018

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**THE IMPLEMENTATION OF COLLABORATIVE PROBLEM SOLVING  
LEARNING USING MIND MAP TO INCREASE JUNIOR HIGH SCHOOL  
STUDENTS' PROBLEM SOLVING ABILITY AND COMMUNICATION ON  
GLOBAL WARMING MATERIAL**

Tata Koswara, NIM 1602971,  
First Supervisor: Dr. Muslim, M.Pd.,  
Second Supervisor: Dr. Yayan Sanjaya, M.Si.,  
Science Education Department  
Post Graduate UPI Bandung 2018

**ABSTRACT**

Students' problem solving ability and communication are one of the demanded abilities in 21<sup>st</sup> century. This research was intended to get description about the increasing of problem solving ability and communication among students who have been received collaborative problem solving using mind map learning and students who only received collaborative problem solving learning. The method which used in this research was pseudo-experiment with the matching-only pretest-posttest control group design. The population of this research was all students from 7<sup>th</sup> grade in a junior high school in Bandung. This research took two classes randomly as the sample. The instrument of this research included problem solving ability test, communication writing ability test, learning and oral communication ability observation sheet. The result showed that the increasing of problem solving ability in the class which received collaborative problem solving using mind map lesson obtained normalized gain average score  $\langle g \rangle$  0,66 and the class which only received collaborative problem solving lesson obtained score 0,49 which was categorized medium. The increasing of writing communication ability in the class which received collaborative problem solving using mind map lesson obtained normalized gain average score  $\langle g \rangle$  0,66 and the class which only received collaborative problem solving lesson obtained score 0,46 which was categorized medium. The students' achievement in oral communication ability who received collaborative problem solving using mind map lesson and students who only received collaborative problem solving was 88.5% which was categorized high. Based on differential test in trust level 95%, it can be concluded that the implementation of the implementation of collaborative problem solving learning using mind map significantly could increase more the problem solving and writing communication ability rather than collaborative problem solving model.

Key words: *collaborative problem solving lesson, mind map, problem solving ability, communication ability.*