

Abstract:- This study investigated the senior high school (SHS) chemistry teachers' perception of the use of simulation games (SGs) in chemical equations balancing (CEB). The study employed a type 1 developmental research design in which SGs were designed, pilot-tested and finally developed. The developed SGs were implemented and evaluated in a two (2) day workshop using 35 chemistry teachers (made up of 20 males and 15 females) drawn from ten (10) SHS in the Sekondi-Takoradi Metropolis in the Western Region of Ghana. Questionnaire and interview were the two (2) instruments used for the study. The findings showed that majority (33 out of 35) chemistry teachers representing 94.2% agreed that SHS students had learning difficulties with regards to simple CEB. Again, all the 35 SHS chemistry teachers representing 100% indicated that they enjoyed the use of SGs materials and instructional approach in teaching simple CEB and that they wanted more of the SGs materials to be developed and used in teaching abstract chemistry concepts. It was recommended that stimulating experiments such as SGs approach should be designed and developed to interest students in the exciting field of chemistry so that more students may be drawn into studying chemistry.