

## EFFECT OF JIGSAW TEACHING MODEL ON SCIENCE CONCEPT MASTERY AMONG FEMALE STUDENTS IN COLLEGES OF EDUCATION, GHANA

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### ABSTRACT

Teachers in general used varied pedagogies to communicate content-based concepts to students with varied cultural and educational backgrounds. However, most of these teachers overlooked jigsaw teaching model. The study focused on two important areas which are to investigate the female students' concept mastery and to identify students' intrinsic motivation in science concepts learning when the concept is taught using jigsaw teaching model. Ninety-four (94) randomly selected first year female students from the Presbyterian Women's Colleges of Education formed the study sample. Experimental data were collected using pre-test and post-test. Structured questionnaire was also administered to a sample of 40 conveniently selected female students from the experimental group. Observation and interview were also conducted to gather self-reported data on students' intrinsic motivation. The quantitative data was analyzed using descriptive, t-test and chi-square statistics. The qualitative data was analyzed using thematic content analysis. The results of the study indicate that greater number of students obtained better results as they learnt and remembered better through jigsaw model. Further, students' participation was generally higher and intrinsic motivation shown in the students when they learnt through jigsaw model. The study recommends that teachers in the colleges of education, particularly those in female colleges, should use the jigsaw model to encourage and motivate students to learn science. The study also recommends that the model should be extended to other colleges of education dealing with mixed students to further expand the efficacy of the model in science concepts mastery and building of intrinsic motivation.

**Keywords:** Jigsaw model, intrinsic motivation, science concept mastery, female students, Colleges of Education.