

EVALUATION OF TRADITIONAL AND SKILL-ORIENTED TEACHING AND ASSESSMENT IN ENHANCING GENERIC SKILLS OF STUDENTS IN CHEMISTRY COMPONENTS IN GRADE SEVEN SCIENCE: A CASE STUDY IN CENTRAL PROVINCE, SRI LANKA

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Formative and summative assessments are used to evaluate students' learning process to fulfil intended learning outcomes. This research examines the effectiveness of traditional teaching and assessment versus skills-oriented instruction and assessment in enhancing generic skills in learning Chemistry in Grade Seven class in the Central Province of Sri Lanka. This is an experimental study employing a mixed methods approach. Two subunits from the Grade Seven science curriculum were selected for instruction. Nine Schools were selected from the central province with a sample size of 636 students by convenience sampling. Two parallel classes of Grade Seven in each school were selected. A Pre-test was administered to both classes to ensure comparability of the groups. One class was considered a control group, and the other class was an experimental group. In the 2nd sub-unit, these groups were interchanged. The first lesson was conducted using the traditional method for the control group and using skill-oriented instructional and assessment methods for the experimental group. The parallel classes were switched over in the second lesson, employing the same teachers. After the teaching-learning process, post-tests were administered to both groups for both lessons. While conducting both traditional and skill-oriented learning, generic skills were observed by the researcher with the help of three other teachers with scoring rubrics. The difference between the mean scores of pre-tests, post-tests and generic skill tests were compared. According to the results, skill-oriented groups showed significantly higher performance than the traditional group. Furthermore, the observational data analysis demonstrated that the students of the skill-oriented instructional group demonstrated better orientation to real-life situations. Findings from focus group discussions with students and teachers reveal that skill-oriented instruction and assessments cultivate much higher generic skills than traditional instructions and assessments. According to the above, the current teaching-learning process has to be re-evaluated to enhance students' meaningful learning in the chemistry component of Grade Seven science.

Keywords: Assessment, Meaningful learning, Skill-oriented approach, Student performance