

- Title:** Development of Students' Knowledge-Behavioural Changes in Relation to Sustainability through a Case Study
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- Abstract:** The purpose of this study is to develop students' knowledge and behavioural changes in relation to sustainability through a case study. Cooperative Problem-Based Learning (CPBL) was used as a teaching and learning approach among the first year chemical engineering students. A case study was designed to create a learning environment where students involved in the 'Waste to Wealth' Campus Contest. A quantitative method was conducted. Data for the research were gathered through administrated a survey instrument at the beginning and end of semester. Structure of Observed Learning Outcomes (SOLO) taxonomy and Precaution Adoption Process Model (PAPM) of changing individual behaviour were used to measure the levels of students' knowledge and behavioural changes, respectively. The findings showed that CPBL significantly developed students' knowledge, and behavioural changes towards instilling the awareness of sustainable development.