

STEM education has been interested in many countries, which can be considered as an important highlight in the innovation of teaching methods in recent years in many countries around the world. STEM is a curriculum that is based on the idea that education should equip learners with the knowledge and skills related to science, technology, engineering and math - in an interdisciplinary approach so that the learners can apply them into solving daily problems. There in Malaysia, the STEM education system develop year by year. Besides, students lack in high order thinking skill. There students not able to answer the question based on high order thinking. Students also lack to build the things for project base. Students in year 4 in Science class face problem in answering question base high order thinking skill. The students also not able to get Band 6 in class room assessment. STEM Engeneering desgn process as a tool apply in developing high order thinking skill among year 4 students in energy topic. Engeneering Design Process with five fase use in lesson to teach topic energy. The design of the research is experimental quantitative research with non – equivalent control group design. The study involved 61 students in class a consisting of 30 students in year 4 as experimental class and class b with 31 students as the control class from year 4. Data Collection and Research Instrument The pre-test and post-test data were collected by using a test technique. The pre-test was given before the learning process and the post-test was given after the treatment. The research instrument used in this study is for measuring students' high order thinking skills in the form of a test sheet. After the treatment can see the improvement in answering high order thinking skill questions.