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**Does problem based learning guide students to solve problems in real life situations?
A study in A/L biology**

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Many students perform well in written exams conducted nationally and locally. However, many fail to succeed in real life situations. A paradigm shift in teaching-learning process is therefore essential.

Problem Based Learning (PBL) is an effective method to overcome the challenge where learning is driven by an ill structured problem. The objective of the study was to provide students hands-on and minds-on experiences to solve problems in their real life situations. Six Advanced Level parallel classes from three schools in Kandy and Matale districts were identified and classified into two as PBL and non-PBL. Misconceptions were identified through a diagnostic test and multifaceted problems were crafted to clear all the misconceptions, covering the whole unit. Teachers of PBL classes were trained to use PBL and the teachers of the other group were allowed to use their own methods. Students of the PBL group were guided for a variety of activities and allowed to use all the sources of information to develop their knowledge and skills. Both the types of classes were observed continuously and field-notes were made. Observations were confirmed after interviews with teachers and students. Data were triangulated and four assertions were formulated using key findings.

PBL provided the students a joyful learning experience and to be involved in activities to construct their own knowledge. They searched various sources to obtain relevant knowledge for solving the problems. Contributions of each member in the groups were enormous. Students developed their critical thinking ability. They explicitly assessed the meaning and significance of information given to them and examined the problems with multiple views. Each student had an opportunity to exhibit his / her maximum capacity. Hidden talents were exposed. However, in non-PBL classes the students learned passively and conflicts among the students were noticed. A successful guidance through PBL assisted the students to reach the maximum in learning biology that enabled them to practice solving problems in real life situations. Perfectly crafted problems and careful preparations were essential for the successful implementation of PBL. Hence, teachers are to be well trained in this methodology.