

Can Laboratory Experience Enhance Students' Motivation in Studying Chemistry?

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Abstract

Chemistry is a heavy-content science subject that requires combination of abstract thinking, mathematical skills and practical work which emphasize both theoretical and analytical skills to excel. Chemistry students often find these rather difficult, and most will struggle in classroom learning and subsequently decrease their interest and motivation of learning the subject altogether. This paper investigates on alternative ways and approaches for educators teaching the subject by introducing frequent laboratory experiments for students which could increase their motivation of learning the subject. Laboratory work increases mutual collaboration between educators, students, and their peers which in turn help build sense of community and support which enhance motivation. Experimental learning also can be fun and engaging by making learning more interactive. At the same time, learners are able to better understand the chemical concepts learned in the classroom and apply in their theoretical learning as laboratory work occurs in real-time which help to increase confidence and motivation of learning Chemistry. We also asked students opinion by doing a short interview and questionnaire and from there, educators could design an effective teaching plan to teach Chemistry both in Upper Secondary as well in Pre-University level.

Keywords: academic, education, holistic, practical, science