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INCORPORATING A SERVICE-LEARNING COMPONENT IN AN ORGANIC CHEMISTRY LABORATORY COURSE OF A SMALL LIBERAL ARTS COLLEGE

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Synopsis:

Service learning (SL) has been progressively introduced into various curricula in the past years but has gained implementation fairly recently in the organic chemistry laboratory. In our case, we've incorporated service-learning into a second-year undergraduate organic chemistry laboratory course (organic chemistry I and II), wherein undergraduate organic chemistry students teach students from secondary schools (high schools) in the community a variety of organic chemistry experiments.

Incorporating a Service-Learning Component in an Organic Chemistry Laboratory Course of a Small Liberal Arts College

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Service-learning (SL) has been progressively introduced into various curricula in the past years but has gained implementation fairly recently in the organic chemistry laboratory. In our case, we've incorporated SL into a second-year undergraduate organic chemistry laboratory course (organic chemistry I and II), wherein undergraduate organic chemistry students teach students from secondary schools (high schools) in the community a variety of organic chemistry experiments. The experiments encompass basic organic chemistry laboratory techniques (i.e. distillation and extraction) to more advanced experiments involving syntheses, mechanisms and reactions. Insight on the extent and content of undergraduate student learning from the implementation of SL in the course are gathered from their organic chemistry SL project proposals (planning stage), critical reflection essays (post-activity) and assessed through a pre-designed rubric which include the SL objectives. The results of this 2-year study (4 consecutive organic chemistry laboratory semesters) of incorporating an SL component into the organic chemistry laboratory will be discussed.