Education for Sustainability: Implementing a Place-Based Watershed Science Course for High School Students

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Abstract : Development and implementation of a place-based watershed science course for high school students will prove to be a valuable experience for both student and teacher. By having students study and assess the watershed dynamics of a local stream, they will better understand how human activities affect this valuable resource. It is important that students gain tangible skills that will help them to have an understanding of water quality analysis and the importance of preserving our Earth's water systems. Having students participate in real world practices is the optimal learning environment and can offer students a genuine learning experience, by cultivating a knowledge of place, while promoting education for sustainability. Additionally, developing a watershed science course for high school students will give them a hands-on approach to studying science; which is both beneficial and more satisfying to students. When students conduct their own research, collect and analyze data, they will be intimately involved in addressing water quality issues and solving critical water quality problems. By providing students with activities that take place outside the confines of the indoor classroom, you give them the opportunity to gain an appreciation of the natural world. Placed-based learning provides students with problem-solving skills in everyday situations while enhancing skills of inquiry. An overview of a place-based watershed science course and its impact on student learning will be presented.

Keywords : education for sustainability, place-based learning, watershed science, water quality

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1