

POSTER PRESENTATION

THE DIATOM ERA₃ -ENVIRONMENTAL RESPONSIBILITY THROUGH AWARENESS, ATTITUDE, AND ACTION

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Global loss of biodiversity ranks among the most pervasive environmental changes of our time. The goal of this research is to introduce microbial biodiversity to K-12 students, as algae are present in every aquatic habitat. In Georgia children are not exposed to algae and diatoms until later in their education. A new framework of teaching children alongside aquatic habitats has allowed the linking of biodiversity with gradients of human influence. Since this program is long term, current assessments are more qualitative than quantitative. Interest has been shown from students based on enthusiasm at programs we have offered, and word-of-mouth conversations with formal and informal educators indicates that there is a need and desire for implementation in the classrooms. We developed a simple questionnaire to be completed by students and teachers to assess current knowledge about algae and any misconceptions. Pre- and post-tests were also developed for the curriculum to assess student understanding of the information provided in programs. We have found that there is a need and desire for information about algae and diatoms in the schools. Our project offered teachers the opportunity to incorporate algal studies into their classroom with little to no cost. In addition to a detailed curriculum that can be performed by teachers, GCSU Academic Outreach has staff available to make visits to schools, or accommodate classes in a field trip setting to introduce them to algal studies using the Georgia Performance Standards. We have currently completed the K-2 curriculum. We also have developed an outline and goals for 3-12 curriculums and are continuing to compile data from a variety of sources to create a teacher-friendly booklet about algae and diatoms that will contain information relevant to Georgia Performance Standards. We have also determined which Georgia Performance Standards can best be covered for each grade level using our proposed curriculum. We also plan to offer teacher trainings either as one day workshops in the schools, or as part of a summer workshop for teachers.