Aquatic Ecology for Teacher, EDG644/BIO 644
Delayed Post-Survey Open-Ended Questionnaire Assessments
9 Months after Summer Program

The two most frequently identified strengths of the course, reported by eight teachers, were the hands-on activities and field studies taught throughout the course. Another five teachers reported the course strengths as the practical uses of content, skills, lessons, pedagogy, equipment, and the resources provided to them to use in their teaching.

Teachers were asked to identify the single most beneficial aspect of the course in regard to content, pedagogy, and classroom teaching. The most frequent response for the course strength related to content, reported by eight teachers, was the depth of content learned. Real life examples and the link between content, social issues, & environmental issues was the second most frequent response, reported by three teachers. The most frequent response for the course strength related to pedagogy, reported by seven teachers, was the use of hands-on activities in the course. The use of community resources (5 teachers), teaching materials (4 teachers), and the connection of course content to real life and current issues (3 teachers) were the most frequent responses to the strength of the course in regard to classroom teaching.

In response to the question of how their participation in the course will help improve their students' learning, ten of the teachers reported that their students would learn more content, five reported that their students would become more involved in activity-based learning and thus learn more, four reported that their students would experience more real life learning, three reported that their students would utilize an increased number of resources in their learning, and two reported that their students would learn more about human impact and responsibility and would become more excited and positive because their teacher was.

While six of the teachers reported that there were no barriers to teaching the course content in their classrooms, the other teachers reported barriers related to taking their students on field trips and issues related to curriculum. The barriers identified by teachers to utilizing field trips in their classroom teaching included the lack of usable sites that are safe and near the school (3 teachers), the difficulty of obtaining permission slips for all students to participate in field trips (1 teacher), limited ability to take field trips based on scheduling constraints (1 teacher), and the difficulty presented by large class sizes (1 teacher).

Barriers to implementing the course curriculum in the classroom were identified by five of the 16 teachers. A barrier reported by two of the teachers was the lack of a match between the curriculum taught during the course and the subject matter that they teach in the classroom. Other barriers reported were a limited amount of time devoted to the 5th grade science curriculum due to a focus on the social studies and math state assessment (1 teacher), the difficulty of adapting the course content to the level of elementary students (1 teacher), and the requirement to teach from a science kit that leaves little time to teach other activities (1 teacher).