The Role of Zoos and Aquariums in Education for Sustainability in Schools

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In sustainability circles there is a term, Education for Sustainable Development (EfSD), that is starting to become more mainstream to schools, and in turn to organizations that include schools as a primary audience. AZA accredited zoos and aquariums, together reaching 15 million students annually, may want to pursue future development with this focus in mind. Although few of our institutions use the term education for sustainable development, even now, many of our conservation programs and messages tie to the sustainability elements of people, finances, and the animal and its habitat.

Historically we have worked together, often with external partners, to create shared conservation education programs. Some examples of programs that have included strong connections with education for sustainable development are Suitcase for Survival, Aquatic Invaders, Bushmeat Crisis, Amphibian Conservation, Party for the Planet, Seafood Watch, Climate Change and Palm Oil Crisis.

Many topics offered by zoos and aquariums are primarily designed and taught with concepts of sustainability. The unique condition of having wild animals in a human-constructed facility creates the social and environmental relationships necessary for EfSD. Furthermore, most of the school-based topics in zoos and aquariums address economic impact of environmental action as that is relevant to the world of conservation.

For most zoos and aquariums, biodiversity is the dominant topic linked to sustainability from early childhood through university programming, in both outreach and on-site school efforts. Over half of all zoos and aquariums use biodiversity as a frame for sustainability for pre-K programming, and over 90 percent do so for middle school and high school programming.

The second most dominant conservation message is that of recycling or reusing. As with biodiversity, this is consistent in zoos and aquariums across all ages, grades, on-site and outreach programs. However, for teacher workshops, biodiversity is equal to water conservation as the second most common topic. For other ages, grades, and contexts for zoo and aquarium school interactions, water conservation is the third most dominant topic.

Increasingly, zoos and aquariums are incorporating topics into their educational programs that are much more clearly aligned with EfSD. Societal issues such as energy, transportation, carbon neutrality, and social capital are becoming common in programming and are likely to be conducted for school audiences. For 95 percent of zoos and aquariums, on-site school programming, with the exception of Pre-K programming, includes sustainability topics. Far fewer zoos and aquariums offer sustainability topics in outreach programs, and over a third do not offer them to college and university classes, reflecting the more specialized role of the animal science or animal behavior content the zoo or aquarium provides for higher education.

Education for sustainability faces several challenges in zoo and aquarium programming. With on-site school groups, as well as in schools, the biggest challenges include making the zoo or aquarium collection connect to sustainability, establishing actions that promote sustainability in learners' lives, providing specific and immediate applications for those actions and learning, and offering topics relevant to the individual's life. It is often difficult for our guests to transfer concern/interest for our often exotic animals to concern/interest in local wildlife.

Although there has been great work already done to connect school audiences with these issues of sustainability, there are ample opportunities for zoos and aquariums to add to these efforts. The mission of animal conservation for zoos and aquariums is clearly grounded in the tenets of education for sustainable development, even if the institutions do not necessarily label their programs as such. As zoos and aquariums increase environmental issues messaging such as climate change, carbon footprint, and alternative energy sources, our engagement with carrying sustainability messages to schools can only increase.

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