

Proposal of the World Lake Student Conference 2008

In November 2008, students from ten countries gathered in Shiga, Japan to discuss the current relationship between humankind and the natural world, and to establish goals for how we may exist in harmony in the future. This proposal communicates the consensus of the World Lake Student Conference 2008.

1. Lakes and Environmental Education

Environmental Education is a system of indoor and outdoor activities aimed at raising people's awareness about natural surroundings and people's role and responsibilities in management and interactions with environment. Environmental education should be experiential and integrated into everyday life through school, media, home and family.

1-1 Fundamental Importance of Lake Environments

Lakes are incredibly valuable ecosystems: they provide drinking water and food, control floods, recycle nutrients, sustain biological diversity and act as indicators of environmental change. They carry cultural, recreational, religious and economic value. Unfortunately, lakes are vulnerable to human impact and today many of them are deteriorating. Because water is the basis of all life, we must protect this precious resource.

1-2 Necessity of Environmental Education

Environmental education has intrinsic worth, and is a valuable means of achieving a sustainable harmony between humankind and nature. Once people understand the importance of lakes and wetlands on a personal level, once we realize the intricacy and beauty of these ecosystems, once we properly value nature, then we can genuinely address today's environmental problems. Researchers, educators, students – all people of the world – must provide educational opportunities so that all people may develop an appreciation for nature and desire to protect the environment.

1-3 Environmental Education in Different Countries

While concern for environmental issues is growing, across the world Environmental education lacks depth and breadth: it is limited or non-existent.

1-4 Advantages and Disadvantages of Environmental Education

Scientific knowledge abounds across the world, whether based upon professional research or lived experience of local people. Many educators and researchers devote their lives to sharing this knowledge and where environmental education is strong, it focuses on regional issues and facilitates citizen action. However, global level of environmental awareness is insufficient. In some developing countries environmental education is lacking entirely; among industrialized countries, only few require environmental education as part of the standard public school curricula. Too often this education is left to under funded NGOs. While some countries are improving their environmental education systems, many people reach adulthood without learning about or experiencing nature.

1-5 Ideal Environmental Education in the Future

An ideal environmental education system reaches all people throughout their lives, regardless of nationality, economic status, etc. This future education system employs fun, interesting, and experiential learning opportunities that are appropriate to different age groups and various education levels. Importantly, ideal environmental education inspires people to actively protect the natural world. This system relies on a network of students, educators, researchers, media, NGOs and governments that integrates environmental issues into daily life. This ideal environmental education requires significant financial support, but the benefit of a sustainable world is priceless.

1-6 Mission for the Next Age

First and foremost, environmental education should help people understand how the natural world functions, demonstrate the importance of preserving the environment and facilitate their participation in its protection. Based upon international cooperation and sound science, environmental education can help create a respectful relationship between humans and nature.

2. Lake Management

A lake is an aquatic ecosystem that is a perennial, enclosed or semi-enclosed waterbody with a measurable residence time and has interactions with its catchment area and the global environment.

2-1 Problems concerning Lake Environment

There are some common problems threatening many lakes around the world, both at the local and global scale. The major problems are water pollution, introduction of invasive species, over-exploitation of the aquatic resources, reclamation, eutrophication and climate change.

2-2 Deterioration of Lake Environments

Deterioration of the lake environment results in a decrease in biological diversity, a lower quality of its associated resources and impaired ecosystem services.

2-3 Reasons for lake deterioration

Lake environments are changing due to increased population and industrialization. Moreover the lack of respect and environmental education of the citizens along with the mismanagement by the governments accentuate lake deterioration.

2-4 The long-term goal of Lake Management

The long-term goal is to pursue sustainable development, which includes maintaining adequate water quality, conserving the ecological integrity of lakes, preserving their cultural and aesthetic value and promoting their economic aspects.

2-5 Steps to improve Lake Environmental Conditions

The steps are as follows:

1. Citizens, scientists, companies, NGOs, governments and international organizations should open a platform for communication.
2. We should evaluate the status of lakes and whether or not they require management.
3. Current management practices should be analyzed and assessed to see if they are sustainable. If not, we should work together to determine what went wrong and why.
4. We should find a way to resolve these issues and work together to implement these solutions.
5. Finally we should see if the lake quality has improved. If not, then we need to reevaluate the management.

2-6 Mission for the Next Age

In WLSC 2008 we drafted the definition of a “Lake” and the five steps of lake management. After this conference, we are going to spread awareness of these ideas as much as possible and report the outcome to World Lake Conference 2009. The mission for the next age is to broaden scientific knowledge and seek financial support to implement these five steps in lake management.