The System of Lifelong Environmental Education in Tomsk Region
Siberia, Russia

CONTRIBUTORS
Alex Russ, Cornell University
Marina Mikhailova, Department of Natural Resources, Tomsk Region Administration
Olga Kobzar, Department of Natural Resources, Tomsk Region Administration
Alexander Adam, Department of Environmental Management, Tomsk State University

GEEP is a partnership of the U.S. Environmental Protection Agency, the Environmental Protection Administration of Taiwan, and the North American Association for Environmental Education.
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Overview

This case study describes a government-sponsored initiative that supports environmental education efforts across all levels of formal and nonformal education in the Tomsk Region, Siberia, Russia.

The System of Lifelong Environmental Education is a government-sponsored network of various organizations (e.g., schools, universities, NGOs, libraries) that conduct environmental education across regional, municipal, and local levels.

The goal of this system is to coordinate educational programs and initiatives that contribute to environmental conservation, culture, and knowledge in the region. The system connects and provides ongoing support for organizations that develop environmental educational strategy and materials, provide professional training in environmental fields, organize educational projects on a municipal level, and conduct environmental education activities in schools and other small organizations.

This case study illustrates:

• The value of networks, volunteers, and partnerships in the success of large-scale, regional environmental education program.

• How engaging state, local, and community-based stakeholders can contribute to widespread participation in environmental education.

• How bringing environmental educators together to share and develop best practices has a positive impact on the continuation of a large-scale environmental education initiative.
Background

Tomsk Region (or “Tomsk Oblast”) is one of 85 top-level political divisions of Russia, located in Western Siberia, with a population of over one million people. Tomsk Region has an impressive area of 316,900 square kilometers, which is larger than the United Kingdom, Italy, or New Zealand.

The System of Lifelong Environmental Education (the System) in Tomsk Region is one of few regional environmental education initiatives in Russia of this scale. In 1977 the USSR hosted the first intergovernmental conference on environmental education, but subsequent development of regional or national-level associations for environmental education was slow or did not have a strong influence on educational policy. In 2005, The System of Lifelong Environmental Education was created in the Tomsk Region to coordinate environmental education at the regional level. Currently Russia is expanding upon federal-level and regional-level associations for environmental education. The new Interregional Association for Environmental Education functions at the federal level, while the System of Lifelong Environmental Education in Tomsk Region is one of the leading professional associations at the regional level.

Organizers of the System include several departments of the regional government including the Department of Natural Resources and Environmental Conservation, the Department of School Education, the Department of Professional Education, and the Department of Culture and Tourism. A formal program, Lifelong Environmental Education in Tomsk Region, and the regional government budget support the System.
Organizations participating in the System of Lifelong Environmental Education are grouped into one of three levels of environmental education centers:

(1) First-level centers include regional governmental departments and other organizations, which develop environmental education curricula, conduct professional development for environmental educators, and organize conferences and workshops.

(2) Second-level centers include municipal-level organizations such as libraries and afterschool educational organizations, which organize specific environmental education programs and environmental conservation activities.

(3) Third-level centers include public schools and kindergartens that promote environmental education in their curriculum and afterschool programs.

As of 2017, there are 12 first-level environmental education centers, 20 second-level centers, and 77 third-level centers. All municipalities of Tomsk Region have a variety of these three levels of centers, and each unique combination serves the local need for environmental education and engagement. The government plans to support the System of Lifelong Environmental Education through 2020, with the possibility for extension.

Approach

Local organizations working as part of the System of Lifelong Environmental Education conduct various activities to advance environmental education in the Tomsk Region. Activities are designed to engage a variety of audiences at the regional, local, and community levels through conferences, journal publications, and community-based volunteer activities.

- **Conferences for educators.** Biannual two-day conferences on environmental education are conducted in Tomsk, Russia. Each time, about 500 educators participate in these conferences, with several keynote speakers on the first day, and several breakout sessions with multiple presentations, discussions, and workshops. Presentation topics cover environmental education, for example, through schools, higher education, mass media, kindergartens, and natural reserves.
Conferences for schoolchildren. Public schools participating in the System conduct a number of annual conferences for schoolchildren where students present their research projects or art projects related to environmental conservation, environmental science, and regional biodiversity.

Journals for environmental educators. Governmental departments in the Tomsk Region publish the annual journal for environmental educators called “Lifelong Environmental Education in Tomsk Region”. Articles in this journal are written by local experts, and guests from other regions, who work in the fields of education, psychology, and youth development in educational and research organizations, NGOs, museums, and libraries.

Siberian Pine village groves. Tomsk Region is home to several dozen unique Siberian Pine village groves. These groves are traditional forests near old villages that have ecological and cultural significance. Many environmental education activities take place in these groves in an effort to involve people in Siberian Pine planting and to educate them about the ecological values of these groves, which are threatened by land development and illegal logging activity.

River cleanup. Environmental educators are involving an increasing number of schoolchildren and families in annual cleanups of water and riverbank pollution since the early 2000s. Many schools and local volunteers join cleanups and related educational activities each year as they learn about and contribute to the health of these ecosystems.

Eco-ethnographic festivals. The Department of Natural Resources and Environmental Conservation organizes ecological festivals in an ethnographic park outside Tomsk (The Village Park “Okolitsa”), which combines environmental inquiry, games and other activities that educate park visitors about environmental protection, biodiversity, and the local Siberian culture.

Environmental trails and summer camps. Environmental education providers are using protected areas for teaching about biodiversity, local geography and natural resources. Summer camps for schoolchildren are conducted to benefit children's health and increase their environmental knowledge.

Evaluation Plan

The System of Lifelong Environmental Education updates the plan for sponsored environmental education activities every year, with the guidance of the Coordination Council. The Coordination Council is comprised of about 20 representatives from various environmental education organizations, each of which assists in the monitoring and adjustment of the plan as needed.

The Coordination Council evaluates the progress of the System based on monitoring of the following indicators: the quantity of environmental education centers, number of educational organizations conducting environmental education, number of local residents participating in environmental education, the number of large environmental education events (e.g. environmental festivals and conferences), and the number of municipal environmental education programs.
Lessons Learned

Evaluation of the System of Lifelong Environmental Education suggests that a few key factors impact the success of such an expansive initiative. The presence of a functioning and expanding network, engaged volunteers, and the maintenance of effective partnerships have all contributed to the success of the System.

- **Networks are central to the success of environmental education across regional, municipal, and community levels.** Collaboration among the organizations providing formal and nonformal environmental education as part of the System helps to sustain and expand the reach of environmental education centers in all levels of the Tomsk Region.

- **Volunteer opportunities for learners of all ages encourages the development of practical environmental conservation actions, especially when integrated with environmental education.** Opportunities such as tree planting, river cleanups, building bird houses, and environmental monitoring in the city, rural areas, and protected areas builds interest at the local level by involving people in nonformal environmental educational activities.

- **Partnerships between regional, municipal, and local level organizations, including business and media, are key to providing effective environmental education.** Partnerships are important not only at the organizational level, but also should be encouraged to develop among children, adults, and families in an effort to build a connection with and appreciation of the natural environment.
Resources

The following websites provide additional information about environmental education events, teaching materials, curricula, electronic books, and other resources that support environmental education in Tomsk Region.

- Department of Natural Resources and Environmental Conservation of the Tomsk Region
- Environmental education publications
- Tomsk Regional Youth Library
- Tomsk Municipal Library
- Department of Education of the Tomsk Region
- Ecodeko

Contacts:

- Marina Mikhailova (mmg1677@mail.ru), Department of Natural Resources, Tomsk Region Administration
- Olga Kobzar (cobol@green.tsu.ru), Department of Natural Resources, Tomsk Region Administration
- Alexander Adam (adam@green.tsu.ru), Department of Environmental Management, Tomsk State University