Education activities

	Country	Site	Contact name	Contact e-mail	Site web	LTER education rep	LTER education rep e-mail	LTER education rep 'phone	Approx. number of participants
10	Australia	Warra	Dr Simon Grove	info@warra.com	www.warra.com, www.warra.net	Dr Simon Grove	info@warra.com		About 12 groups per year, between 20- 25 students per group
3	Czech Republic	Devin Thermophilous Woods	Radim Hédl	radim.hedl[at]ibot.cas.cz or rhe[at]centrum.cz	http://www.lter.cz/index.php?option=com_content&view=category&layout=blog&id=14&Itemid=20&lang=en	Palava Landscape Protected Area administration,	http://www.palava.ochranaprirody.cz		
4	Czech Republic	Krkonoše National Park	Jaroslav ANDRLE	jandrle@krnap.cz	www.lter.cz, http://www.krnap.cz/en/		1. jkaspar@krnap.cz (vice director of the NP Administration, PR Manager) 2.jandrle@krnap.cz (Scientific and site coordinator)		Environmental education, provided by the Krkonoše National Park administration (also on LTER sites in our National Park)
5	Czech Republic	Lednice-Horní Les	Josef Suchomel, Jiri Kulhavy	suchomel@mendelu.cz, jiri.kulhavy@mendelu.cz	http://www.uel.cz/en/research_stations		http://www.uel.cz/en/		university students 4/100, excursions for national and foreign scientists 5/10, forest owners and management staff 3/5, state and public institutions 3/5
6	Czech Republic	Křivoklátsko	Petr Petřík, Karel Boublík, Tomáš Černý	petr.petrik@ibot.cas.cz, karel.boublik@ibot.cas.cz,tomas.cerny@ibot.cas.cz	www.ibot.cas.cz	Petr Petrik	Institute of Botany, Academy of Sciences of the Czech Republic	420 271 015 246	2 to 30
11	Czech Republic	Rájec-Němčice	Jiri Kulhavy, Ladislav Mensik	jiri.kulhavy@mendelu.cz, ladislav.mensik@mendelu.cz	http://www.uel.cz/en/research_stations	Jiri Kulhavy, Ladislav Mensik	jiri.kulhavy@mendelu.cz, ladislav.mensik@mendelu.cz		university students 4/100, excursions for national and foreign scientists 5/10, forest owners and management staff 3/5, state and public institutions 3/5
16	Czech Republic	Čertoryje – Vojšické louky	Karel Fajmon	Fajmon@bilekarpaty.cz	http://www.lter.cz/index.php?option=com_content&view=category&layout=blog&id=18&Itemid=24&lang=en	PLA Administration, RNDr. Ivana Jongepierová,	Jongepierova@nature.cz		In 2010 the number of participants of educational activities provided by the 2 NGOs mentioned above and the PLA Administration was cca 7900.
1	Czech Republic	Trebon wet meadows	Jiri Dusek	dusek.j@czechglobe.cz	www.czechglobe.cz		http://www.lter.cz, www.czechglobe.cz		several students (3-4), courses 15-25 tudents
17	Germany	LTER-D	Baessler, Cornelia	cornelia.baessler@ufz.de	http://www.lter-d.ufz.de/index.php?en=15578	there is no education representative in LTER-D	The educational projects BEAGLE and PRONAS have been developed (contact: karin.ulbrich@ufz.de). BEAGLE (www.beagleproject.org) is an online biodiversity project open to all schools in Europe. PRONAS (www.pronas.ufz.de)		
23	Israel	Ramat Handiv	Saleit Ron	saleit@ramathanadiv.org.il	www.ramathanadiv-edu.org.il	Saleit Ron	http://www.ramathanadiv-edu.org.il/Lter/LterEng/mai	972-4-6298103	LTER-EDU program- 12 schools. Other educational programs at site- 10,000 teachers and studnts
12	Japan	Fuji-Yoshida Ken-Marubi pine forest site	Takashi NAKANO	nakano@yies.pref.yamanashi.jp	Under constrtuction	Takashi NAKANO	nakano@yies.pref.yamanashi.jp		More than 100 groups / 3000person
19	Namibia	Gobabeb Training and Research Centre	David Montgomery	davidm@gobabeb.org	www.gobabebtrc.org		training@gobabeb.org		we host school visits (K - 12), domestic and international university groups, interns and students, private groups, and community workshops.Approximately 60 groups / 1000 participants per year.
18	Romania	Coastal Danube Delta	Danube Delta Biosphere Reserve Authority (DDBRA	arbdd@ddbra.ro	: http://www.ddbra.ro/	Dr. Ing. Grigore Baboianu – Governor of the DDBRA Ing. Liliana Ivancenco – Responsible for Environmental education and International Relations			
20	Romania	Inner Danube Delta	Department of Systems Ecology and Sustainability – University of Bucharest (DSES-UB) in collaboration with EarthVoice Romania (EVR- professional NGO) and Small Island of Braila Natural Park Administration (SIBNPA)	anvadi@bio.unibuc.ro; earthvoice_romania@yahoo.com; parc_bmb@yahoo.com	http://eco.bio.unibuc.ro; www.bmb.ro	Dr. Nicoleta Geamănă – – Researcher in DSES-UB and Programme Coordinator in EVR Nicolae Zarnescu – responsible for Education, Tourism and Communities in SIBNPA	nicoleta_geamana@yahoo.com		5 groups/50 participants/year

9	south africa	SAEON National Office and SAEON Nodes	Sibongile Mokoena	Sibongile@saeon.ac.za	www.saeon.ac.za	Sibongile Mokoena - National Coordinator Joe Sibiya-Education Officer: SAEON Ndlovu Node Nozipiwo Hambaze - Education Officer: SAEON Elwandle Node Thomas Mtontsi - Education Officer: SAEON Egagasini Node	Sibongile@saeon.ac.za joe@saeon.ac.za nozipiwo@saeon.ac.za Thomas@saeon.ac.za		18 schools. 12 schools have weather stations and are involved in the Weather and Climate programme. 6 schools are involved with the Argo Floats programme downloading and using the data from the Argo Floats. Approximately 45 teachers from all 18 schools attend workshops aimed at introducing them to school-based monitoring projects and to encourage them to integrate the data in their classroom activities.
22	spain	LTER-Spain	Anna Tenés	secretariat@lter-spain.net	www.lter-spain.net (under construction/renewal at this moment)				LTER-Spain is a newly created network composed by 11 sites. At this moment there are not education activities strictly related to LTER although each of the sites have their own education/environmental awareness programmes.
2	usa	Jornada Basin LTER	Stephanie Bestelmeyer, Ph.D	stephanie@asombro.org	http://jornada-www.nmsu.edu/				More than 60,000 kindergarten through 12th grade students and 1,000 teachers have participated in the Jornada Basin Schoolyard LTER Program (sLTER) since its inception in 1998.
7	usa	Coweeta LTER	Jason P. Love	jplove@uga.edu	: http://coweeta.uga.edu	Jason P. Love	jplove@uga.edu	828.524.2128 x113	
8	usa	The Baltimore Ecosystem Study 800 Wyman Park Drive Suite 010 Baltimore, MD 21211	Bess Caplan	caplanb@caryinstitute.org	: www.beslter.org	Bess Caplan	caplanb@caryinstitute.org	410-448-5663, ext. 125	Currently are working with ~20 middle and high school teachers, 4 elementary school teachers, 2 graduate students, and over 200 students comprising grades 2-12.
13	usa	Moorea Coral Reef	Andrew J. Brooks	brooks@msi.ucsb.edu	http://mcr.lternet.edu	Andrew J. Brooks	brooks@msi.ucsb.edu		numerous (California-US) K-12 school teachers to develop educational content for schools (300-400 children/year), we participate in local Earth Day festivals (17,000-20,000 attendees/year) to educate adults, we partner with a local (Moorea, French Polynesia) outreach center to reach members of the general public (100-200 adults/year) in French Polynesia
14	usa	Bonanza Creek LTER	: Elena B. Sparrow	ebsparrow@alaska.edu	http://www.lter.uaf.edu	: Elena B. Sparrow	ebsparrow@alaska.edu	907-474-7699	1. pre-college students and their teachers (about 4,000 includes Alaska but also in other states and in other countries; for example the Plant phenology green-uo and green-down protocols as part of the GLOBE (Global Learning and Observations to Benefit the Environment) developed by BNZ LTER scientists are being used in 22 Countries
15	usa	FLORIDA COASTAL EVERGLADES FCE-LTER	NICHOLAS J OEHM, JR	OEHMN@FIU.EDU	http://fcelter.fiu.edu/	NICHOLAS J OEHM, JR	OEHMN@FIU.EDU	305-773-1181	
21	venezuela	: Oceanographic Time Series CARIACO	Ramon Varela	rvarela@edimar.org	: www.edimar.org	Ramon Varela or Yrene Astor	yastor@edimar.org		We can arrange work for up to 4 students or professionals at a time, with an interest in training aspects or scientific studies in oceanography and marine biology.
24	uk	Moor House-Upper Teesdale	Andrew Sier	arjs@ceh.ac.uk	http://www.ecn.ac.uk	Andrew Sier	arjs@ceh.ac.uk	+44 (0) 1524 595840	We run occasional activities, typicall with groups of 15-20 students

Participants' age(s)	Subjects	Location of activity	Additional information
15 - 18	Forest management and the scientific research that drives this. Examples of some of the techniques used e.g pitfall trapping and some of the SST plots.	Introduction activities at National Forest Learning Centre, followed by visit to site 1 -2 weeks later.	Forest Education Foundation - www.forest-education.com
school children	environmental and conservation issues	At site, at school, at national park, etc. in the Palava LPA headquarters and in the field	
5-18	Inanimate and living nature of the Krkonoše National Park and its surounding	At site, school, NP Administration building, in NP area	There are no such education showing especially and only to LTER sites in the area of our NP, but we plan to focus on it in the future
all ages	Forest ecology, antropogenic activities and management of forest ecosystems, landscape aspects	At site, at the university	
25 years	vegetation ecology, vegetation classification, flora		
all ages	Forest ecology, antropogenic activities and management of forest ecosystems, landscape aspects	At site, at the university	http://www.uel.cz/en/
Varies from primary schools to senior citizens	Bile Karpaty Education and Information Centre based in Veseli nad Moravou offers mainly indoor and outdoor education programmes for K12 audiences (primary and secondary schools), outdoor education programmes and awareness raising events for the public, and helps the Bile Karpaty PLA Administration with interpretation and sustainable use of natural and cultural heritage and sustainable tourism issues. ZO CSOP Bile Karpaty in Veseli nad Moravou focuses its activities at the site on outdoor activities (usually guided field trips). The target audiences vary. Most activities concern experience exchange and are organized for other CSOP member organizations. The topics are usually based on the outcomes of research and management projects, mainly the use of regional seed mixture for meadow restoration and tips for practical management. Bile Karpaty PLA (and Biosphere Reserve) Administration staff provides activities for other state nature conservation bodies, including the Ministry of Environment of the Czech Republic, and university teachers and students. The activities are focused on the use and exchange of the results of scientific research in practical management of habitats and species.	Indoors (mostly schools and the environmental education centre in Veseli nad Moravou) and outdoors (at the site but also elsewhere in the Bile Karpaty PLA and Biosphere Reserve) Most of the outdoor activities take place in the vegetation season - from botanical, entomological, and zoological point of view the site is most suitable from end of April – mid July, as for practical nature conservation measures from July to September	Bile Karpaty Education and Information Centre (an environmental education centre) and ZO CSOP Bile Karpaty (the local chapter of the Czech Union for Nature Conservation). Some specialist activities are provided by the Bile Karpaty PLA (and Biosphere Reserve) AdministrationIn the Czech Republic environmental education is part of school curricula (including the K12 audiences). In the Bile Karpaty Biosphere Reserve education services are also provided by a number of environmental NGOs. Some of these are registered as Environmental Education Centres under PAVUCINA, an umbrella nation-wide organization. Their services are sought out mainly by schools, Local Action Groups, municipalities, and the Bile Karpaty Protected Landscape Area (and Biosphere Reserve) Administration and other state nature conservation bodies. Education activities include both indoor and outdoor activities and school projects. Most of the Environmental Education Centres are also active in public awareness raising and organize events for the public (The Earth Day, European Day of Parks, field trips to protected areas in the biosphere reserve). There are many NGOs, especially local branches (ZO) of the largest CZ environmental
graduate and postgraduate students 18-25 years old	diploma thesis focused to carbon sequestration (master, Ph.D.), courses of the plant ecophysiology	cooperation with the university of South Bohemia (www.jcu.cz)	
BEAGLE is suitable for pupils at 10 years or older. PRONAS makes results of biodiversity research available for 12 to 19 year old students	Beagle -Pupils select a tree and monitor its changes over the year • They report dates for seasonal changes and compare results with other schools • Pupils explore biodiversity on trees using handouts given on the website PRONAS. Educational software and a teacher manual are being developed which present scientific content using simulations and interactive tests. PRONAS is based mainly on the results of the ALARM project (www.alarmproject.net).	There are educational activities at the Helmholtz Centre for Environmental Research – UFZ independent from the LTER-D activities. But the data of LTER sites could perhaps linked to these projects in the future.	There are no cross-site activities according to education within the German network. According to the administrative agencies the different sites have to fulfill different educational responsibilities. Whereas National Parks and Biosphere Reserves have to attract tourists, Universities managing LTER sites provide a range of teaching for students (e.g. excursions, lectures, practical courses). These activities are all independent of each other and are not necessarily cross-linked.
LTER-EDU program 10-18 years old. Other educational programs at site k-12	LTER-EDU is an educational project that offers school students a chance to be partners in a global monitoring effort. The students collect meteorological data and monitor vegetation, arthropods, butterflies, birds and other data. The monitoring takes place at Ramat Hanadiv and around schools, encouraging discussion of ecological questions relating to trends in space and time	The monitoring takes place at Ramat Hanadiv and around schools	
From primary school to adult	How to measure forests; ow this forest has established; the succession of this forest. etc	At the site, our site is located at very close to my institute (about 5 minutes walk).	Our Research institute has “Education Section
The whole spectrum (6 - pensioners)	Arid ecology, environmental conservation, scientific enquiry, climate, desertification, sustainable living, geography, sustainable agriculture, appropriate technology, community tourism.	We perform our activities on site, at our research and training centre within the Namib Naukluft National Park.	http://www.gobabebtrc.org/index.php?option=com_content&view=article&id=46&Itemid=57
local people – kids, children and teenagers (5 – 18 years old)	DDBRA's specialists visits in schools, video presentation of the most important aspects of Danube Delta and discussions on various topics concerning environment protection, in the kinder gardens and schoolsActivities organized for the special events like “The Environment Day”, ”The International Day of Water”, “The Earth Day”, “The International Day of Wetlands”, “The Ozone Layer Protection Day” with children and teenagers participationThe role of young people for balancing the relationships between MAN – NATURE by the youth Type of activities: lectures, field trips and open debates	Location: Information and Ecological Education Centre Tulcea, Sulina Visitor Centre, Crisan Information Centre, Uzlina Information Center and kindergartens and schools of Danube Delta Biosphere Reserve, schools	
Teachers of primary and secondary schools;·Students of primary and secondary schools·Other representatives of identified primary and secondary stakeholders (eg. Farmers, fisherman, civil servants).· Students of primary and secondary schools ;That cover a large age spectrum: 7 to 61 years old	The uniqueness of the Danube Inner Delta – Long Term Ecological Research site The importance of protected areas/Natura 2000, Ramsar sites, national parks Biodiversity richness in Small Island of Braila Natural Park. The role of local population for the biodiversity conservation in the protected areas Type of activities: lectures, field trips and open debates	Information, Education and Visiting Center Stancuta/ Balta Mica a Brailei Natural Park/ Braila county School	http://www.romanianecologicalsociety.ro/home.php?setlang=en

approximately 14-16 years, Grade 7 -9	: Life Sciences, Geography, Mathematics and Science	At schools for school-based monitoring like weather stations and tree monitoring; and selected sites for science camps, e.g. rocky shores for the Elwandle Node, research vessels for the Egagasini Node and parks for terrestrial nodes,	
			interested in further contact
The majority of the Jornada Basin sLTER participants come from the Las Cruces Public School District and the Gadsden Independent School District, both in southern New Mexico. These districts serve a high percentage of students considered “economically disadvantaged” (Las Cruces 90% and Gadsden 92%) and a high percentage of Hispanic students (Las Cruces 71% and Gadsden 96%). Jornada Basin sLTER programs therefore provide enriching opportunities to groups traditionally underrepresented in STEM fields.	Schoolyard Science Studies (Schoolyard Desert Discovery Program) – Asombro Institute for Science Education staff have worked with LTER scientists to develop 31 hands-on activities that can be completed in the schoolyard and/or classroom. These activities mirror active research conducted by LTER scientists. Activities are divided into seven modules: weather, microclimates, water, soil, vegetation, arthropods, and vertebrates. Each module has an associated Science Investigation Kit containing all of the materials and consumable supplies needed to do any activity within that module. Each activity’s write-up includes background material, teacher instructions, tips for completing the project with the entire class, sample tables and graphs, reproducible student pages in English and Spanish, and alignment with New Mexico and Texas science and math standards	Field Trips – Students attend day-long field trips to the Jornada Experimental Range and/or the Chihuahuan Desert Nature Park. They rotate through four hands-on activity stations that have been chosen by their teachers from a menu of 38 stations in four grade levels (K-2nd, 3rd-5th, 6th-8th, and 9th-12th). Classroom Programs – Asombro Institute for Science Education staff members visit classrooms to present one-hour, inquiry-based science programs. These programs have become extremely popular over the past few years with increases in bus costs and other barriers that often prevent field trips.	Teacher Workhops – Teachers attend workshops ranging in length from one day to two weeks to learn about current ecological research being conducted in the region. During longer workshops, teachers conduct a full research project themselves and later share the results with their students.
		Mainly at the schools, but also at a nearby nature preserve and at Coweeta itself	http://cwt-dev.anthro.uga.edu/lterschoolyard
2nd-12th grade, In-service teachers, graduate students	Urban Ecology, Environmental Science, Biological Sciences	Student activities are mostly performed at schools and on field trips to the BES research sites; teacher activities are done during workshops and held at a variety of venues including school buildings, local Universities, and BES research sites	
All ages from 5 through adult	General environmental sciences related to the oceans and coral reefs	These range from science theme based games and arts and crafts projects for younger children to directed reading activities and analytical based science exercises for older children; all performed in the school classroom, tours of our extensive marine aquarium facilities, and craft activities during public festivals	Educational website: http://mcr.lternet.edu/education/
5 – 20 yrs for the pre-college group;	Plant phenology, atmosphere/weather, land cover biology, soils, hydrology, invasive plant species; dedndrochronology; herbivory; Earth as a system;	For K-12 (primary and secondary students) Some at site, most are at theire schools or study sites close to their schools; For community	
ALL AGES	NATURAL AND SOCIAL SCIENCES	PRIMARILY K-12 SCHOOLS AND RESEARCH LABS	http://fcelter.fiu.edu/education_outreach/
More than 18 years old	: Oceanographic techniques in sea aboard a research vessel. Chemistry lab, Physic measurements, Ecology of plankton, Benthic studies.	Our site is in the open sea, and work in the labs of EDIMAR Estación de Investigaciones Marinas de Margarita (Fundacion La Salle) Isla de Margarita.	We receive students in residence scheme (stage), from universities in Venezuela and from others countries, supported by an educational institution of their country of origin. Often we serve to support in the field and in the lab for the completion of a degree work at the level of Bachelor, Master, Doctoral PhD. With the support and tutorial of the university to which the student belongs. The origin of the student can be from any recognized university.
Generally children aged from 9 to 13	Peatlands and climate change	Usually in schools or in our laboratories, but we have run some events at the site	We are planning to develop a website aimed at young people and their teachers. Some teachers use our long-term summary datasets (available from our website) for education