

Sparkling Science goes Citizen Science



Stephan Endlicher
1804 - 1849
Bust in the Arkadenhof
of the University
of Vienna

2015



Science and research are important pillars of a modern knowledge and industrial society and the support of young budding researchers is of special concern to me as minister in charge of science and research. The research programme "Sparkling Science" has successfully been linking innovative research and pre-university promotion of young researchers in an unconventional way since 2007. This initiative, which is unique in Europe, allows children and teenagers to immerse themselves in the enthralling field of science and research at an early age and also enables them to collaborate in the solution of current research questions.

A handwritten signature in blue ink, reading "Reinhold Mitterlehner". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dr. Reinhold Mitterlehner
Federal Minister of Science,
Research and the Economy

| | |
|--|----|
| Preface | 3 |
| Programme description | 6 |
| Examples of projects: | |
| Computer Sciences | |
| Sparkling Games | 8 |
| Designing educational games together with pupils | |
| Medicine and Health | |
| FEM_BREATH | 9 |
| Development of breath tests for personalised medicine | |
| Natural Sciences | |
| Traisen.w3 | 10 |
| WhatHowWhy? Identifying and perceiving of river landscape functions and understanding of catchment processes on the example of the river Traisen | |
| Social Sciences | |
| BreadTime | 11 |
| Lesachtal bread in an intergenerational dialogue | |
| Technology | |
| Valuable Wood | 12 |
| Big shrubs and small trees as a valuable and sustainable resource of wood | |
| Humanities | |
| Doing World Heritage - Grasping World Heritage | 13 |
| Objects and narratives in the context of prehistoric pile dwellings | |
| Learning and Instruction | |
| digital MUSICIANship | 14 |
| New ways of making music in class | |
| Sparkling Science goes Citizen Science | 15 |
| All projects of the 1 st – 5 th Call | 20 |



© Project: "Cavellie"



© Project: "A new Rainforest"



© Project: "Functional feed for cows"



© Project: "Indian Summer in Tiroi"



© Project: "Doing World Heritage"

Sparkling Science When it clicks between schools and science

Sparkling Science is a programme established by the Austrian Federal Ministry of Science, Research and Economy. It has been extremely successful in promoting young budding researchers since 2007, providing children and teenagers with access to science and research at a very early age. It only supports projects in which youngsters are actively involved in authentic research projects within the framework of research – education cooperations between research institutions and schools and make their own contributions to these research activities.

In the 260 projects which have been funded so far students are joining forces with scientists to work on topical research questions. They actively engage in fields of research in which they work independently. They contribute creative suggestions to research approaches, participate in preparing concepts and implementing studies, collect data, interpret this data together with the scientists and present the results in schools, universities and even at scientific conferences.

Variety of topics and open innovation philosophy

Mapping of river landscapes, game-based learning, digital music-making

in class – the spectrum of topics is a broad one and ranges from medical breath tests to underwater archaeology. Funding provided by Sparkling Science is open to all topics. Only projects that take the latest scientific findings in the relevant fields of research into account and elaborate on innovative findings that go beyond the current state of scientific knowledge are funded. New technologies play an important part as well as the concept of Open Innovation. The new and unconventional outside view of scientific questions by the young people provides important contributions to the achievement of the research goals. The contributions made by the students are integrated in the research process according to the current methodical standards in order to ensure that the project results meet all scientific quality standards.

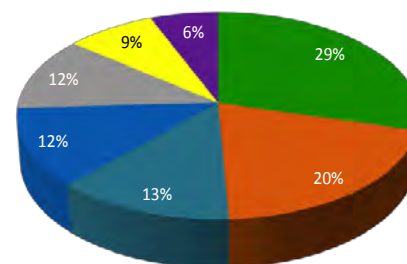
Sparkling Science goes Citizen Science

Citizen Science is a promising new research concept which actively involves citizens of all age groups in science. In Austria Citizen Science also gains more and more importance. Within the framework of Young Citizen Science pupils and other interested youngsters are integrated into current research projects. In Austria the first few Young Citizen

Science projects, which are funded by the Federal Ministry of Science, Research and Economy (BMWFW), started at the beginning of 2015. In this context some projects of the research promotion programme "Sparkling Science" were expanded to enable the general public to take part directly. All eight pilot projects have offered the possibility to take part directly since October 2015! For this purpose they have established special open participation zones for the participation of interested schools from all over Austria.

A list of these pilot projects can be found on pages 15ff.

Research Fields



| | |
|-----|--------------------------|
| 29% | Natural Sciences |
| 20% | Social Sciences |
| 13% | Technology |
| 12% | Computer Sciences |
| 12% | Learning and Instruction |
| 9% | Humanities |
| 6% | Medicine and Health |

Facts & Figures

Current as of June 2015

Programme duration: 2007 to 2017

Key figures on the first five calls for proposals

Research projects: 198
Fellowship projects: 4
Strategic projects: 4
School research projects: 54
Financial support: total 29,2 million Euros

Persons involved

74,347 pupils, consisting of:
22,121 directly involved pupils
52,226 indirectly involved pupils
1,550 scientists and participating students
1,538 teachers and trainee teachers

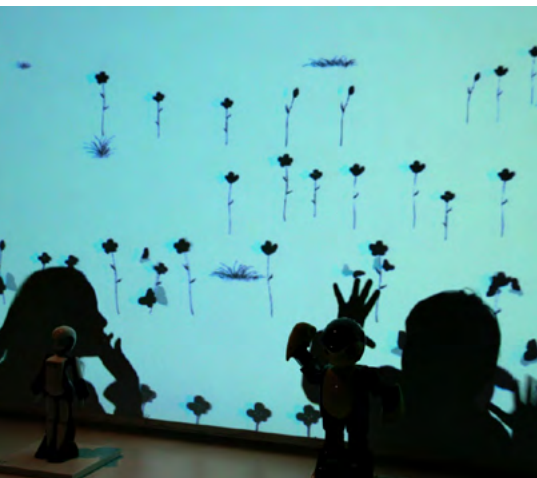
Institutions involved

450 schools and school centres
140 partners from business & society, of which 6 were international partners
174 research institutions, consisting of:
55 universities, 34 from abroad
96 non-university research institutions, 14 from abroad
11 universities of applied sciences, 3 from abroad
10 university colleges of teacher education
3 other institutions

<http://www.sparklingsscience.at/en>

Sparkling Games

Designing educational games together with pupils



This project hypothesises that young people will learn more when they develop games themselves and put them into practice than by just playing them. Within the framework of "Sparkling Games" youngsters develop educational games related to the topics of society and computer sciences, which can be used both in computer sciences classes and other subjects. For this purpose the pupils research (educational) games which they are interested in. Based on this they develop their own games. In this way researchers will get an insight into

"The Sparkling Games project offers us the unique opportunity to let the actual target group of educational games, i.e. youngsters, design them themselves".

Dr. Fares Kayali

which types of games and which game mechanics the target group prefers. Youngsters will for example get information about topics such as copyright and intellectual property, privacy, surveillance as well as social media.

Project leader: Vienna University of Technology, Institute of Design and Assessment of Technology.

Participating institutions:

BFI Margareten (Vienna), GRG Berta von Suttner (school ship) (Vienna); HTBLuVA Spengergasse (Vienna); University of Vienna, Department of Communication; GameCity (Vienna)

Duration: March 1st, 2015 – February 28th, 2017

www.sparklingscience.at/en/Sparkling-games-en.html

FEM_BREATH

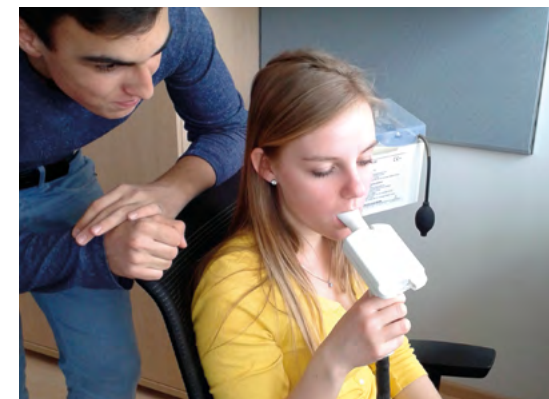
Development of breath tests for personalised medicine

The FEMBREATH project intends to develop a personalised, safe and effective medical drug therapy for cardiovascular diseases by means of a breath test. In this way the optimal individual dose of a drug can be determined in the future. The FEM_BREATH project lessons encourage the youngsters to study in an independent and research-oriented way. They carry out scientific research as well as sophisticated analytical breath gas measurements, they work in the clinical environment, they analyse biostatistical data and interpret it. In this way they get in insight into an emergent research field and experience an enthralling collaboration with researchers and youngsters from abroad.

Project leader: University of Innsbruck, Breath Research Institute (T)

"FEM_BREATH offers pupils the chance to work together actively with researchers in a medical research project. In this way Sparkling Science opens up career paths to natural sciences and medical studies for them."

Dr. Vera Ruzsanyi



Participating institutions:

Akademisches Gymnasium Innsbruck (Tyrol); BG Dornbirn (Vorarlberg); BRG Adolf Pichler-Platz, Innsbruck (Tyrol); BRG In der Au, Innsbruck (Tyrol); Gymnazium Jura Hronca Bratislava (Slovakia); Gymnazium Grösslingova Bratislava (Slovakia); II Liceum Ogólnokształcące Toruń (Poland); Vorarlberg University of Applied Sciences; Medical University Innsbruck, Women's Health Centre and University Hospital for Anaesthesia and Intensive Care (Tyrol); Tiroler Landeskrankenanstalten GmbH; Slovak Academy of Sciences, Bratislava (Slovakia)

Duration: October 1st, 2014 – September 30th, 2016

www.sparklingscience.at/en/FEM-BREATH-en.html

Traisen.w³

Traisen. WhatHowWhy? – Identifying and perceiving of river landscape functions and understanding of catchment processes on the example of the river Traisen



What importance does the river Traisen have for the local people? Do plants and animals that are worthy of protection live there? Can you bath, walk or fish there? What effects does human intervention have on the river landscape? These are the questions that youngsters explore together with researchers. By means of questionnaires, digital maps and field studies the ecological achievements, such as intact river meadows and sustainable flood protection, as well as cultural achievements, such as leisure and recreation possibilities of the river landscapes are explored. In this way the understanding of ecological correlations and processes will be improved and the natural sciences skills of the pupils will be developed.

"It is important that young people become aware of the necessity of a sustainable development of river landscapes and that they support sustainable planning and measures. In Traisen.w³ they work both directly at the river and in a virtual way with geodata and an education software in order to create an understanding at system level of processes in river landscapes."

Dr. Michaela Poppe

Project leader: University of Natural Resources and Life Sciences, Vienna, Institute of Hydrobiology and Aquatic Ecosystem Management

Participating institutions: BG/BRG Josefstraße, St. Pölten (Lower Austria); University of Natural Resources and Life Sciences, Vienna, Division of Analytical Chemistry; Land Niederösterreich, Abteilung Wasserwirtschaft (WA2) (Lower Austria)

Duration: October 1st, 2014 – September 30th, 2016

www.sparklingscience.at/en/Traisen-en.html

BreadTime

Lesachtal Bread in an intergenerational dialogue

How is grain cultivated, harvested and milled? How is bread made? Together with pupils an interdisciplinary scientific team consisting of researchers from the fields of sociology, educational sciences, history and landscape planning explores how local grain cultivation and bread baking techniques were passed on from one generation to the next in the past. Young people will get to know the numerous agricultural and skilled activities related to the cultivation and processing of grain and the production of bread. They explore the traditions related to the immaterial cultural heritage of the "Lesachtal Bread", which are still alive. In this way the present knowledge, which results from long-term experience, can be passed on to the younger generation and the regional identity of the pupils can be strengthened.



Project leader: University of Klagenfurt-Wien-Graz, Department for Intervention Research and Cultural Sustainability (W)

Participating institutions: HLW Hermagor (Carinthia); NMS Lesachtal (Carinthia); University of Klagenfurt, Department for Education and School Development as well as Institute of Science Communication and Higher Education Research (Carinthia); University of Vienna, Department of Social and Economic History; Andres Gonzales Grafik Design (Vienna); Brot- und Dorfverein Liesing (Carinthia); Forum Synergies; Gemeinde Lesachtal (Carinthia); Kärntner Medienzentrum für Bildung und Unterricht (Carinthia); Kulturlandschaftsverein Lesachtal (Carinthia); Kultur- und Mühlenverein Maria Luggau (Carinthia); Austrian UNESCO Commission (Vienna)

Duration: January 1st, 2015 – December 31st, 2016

www.sparklingscience.at/en/BreadTime-en.html

"Bread is a central component of regional food culture, the practices and significance of which are changing massively today. In the Lesachtal in Carinthia, however, local bread traditions have been preserved in a sustainable way. 'BreadTime' investigates traditions related to bread together with schools of the region and explores their importance in the inter-generational dialogue."

Ao.Prof. Dr. Gerhard Strohmeier

Valuable Wood

Big shrubs and small trees as a valuable and sustainable resource of wood



Not long ago almost all equipment and tools for daily routines were made out of wood – especially in rural areas. In this process different parts of the tools were subjected to different strains. Therefore the types of wood used were as varied as its uses. Austrian farmers used almost 50 different species of wood. The youngsters collect these wood species, which are no longer used today, and examine them by means of modern methods. In this way data regarding wood density, strength, shrinkage, etc. can be determined. On one hand students will perform standard tests and on the other hand they will develop and use new, creative testing methods (e.g. scratch resistance). Moreover, they will describe the uses of the collected woods.

"Big shrubs and small trees have a potential for modern and technologically interesting areas of application. In order to use this in the best possible way it is necessary to examine the properties of these woody plants and to make this information accessible."

DI Dr. Johannes Konnerth

Project leader: University of Natural Resources and Life Sciences, Vienna, Institute of Wood Technology and Renewable Materials, Tulln (Lower Austria)

Participating institutions: HBLA für Forstwirtschaft Bruck an der Mur (Styria); HTL Mödling (Lower Austria); Mendel University of Brno (Czech Republic); Forstbetrieb Esterházy (Burgenland); Forstamt und Landwirtschaftsbetrieb der Stadt Wien (MA 49); Wiener Stadtgartenamt (MA42)

Duration: October 1st, 2014 – September 30th, 2016

www.sparklingscience.at/en/Valuable-Wood-en.html

Doing World Heritage - Grasping World Heritage

Objects and narratives in the context of prehistoric pile dwellings

In numerous Upper Austrian and Carinthian lakes remains of prehistoric pile dwellings from the Neolithic and the Bronze Ages can be found. These settlements are up to 6000 years old and are hidden below the surface of the lakes. Therefore it is not easy to see them and very difficult to explore them. The finds from these underwater settlements, however, are very important in order to give people an understanding of this UNESCO World Heritage and to understand its importance. In the course of the project the youngsters carry out interviews with people from the region about prehistoric artefacts such as fish-hooks, needles or tools. In this way they intensively study objects from the pile dwellings and learn to treat the world heritage with respect. Moreover, they will get to know and use techniques for the recording and redesign of the archaeological finds with modern technologies such as laser scan and 3D printing.

"Especially in archaeology it is worthwhile to include young people in the study and development of history. This is not only fun but also increases their positive awareness of our regional cultural heritage."

HR Dr. Anton Kern



Project leader: Natural History Museum Vienna, Prehistory Department

Participating institutions: NMS Seewalchen (Upper Austria); UNESCO NMS Mondsee (Upper Austria); VS Keutschach am See (Carinthia); University of Salzburg, Department of Communication Studies, Transcultural Communication Unit (Salzburg); University of Vienna, Department of European Ethnology (Vienna); Atterwiki (Upper Austria); Heimathaus Schörfing (Upper Austria); Heimathaus Vöcklabruck (Upper Austria); Kuratorium Pfahlbauten (Vienna); University of Vienna Children's Office; Landesmuseum Kärnten; OTELO eGen (Upper Austria); Oberösterreichisches Landesmuseum; Pfahlbaumuseum Mondsee (Upper Austria)

Duration: November 1st, 2014 – October 31st, 2016

www.sparklingscience.at/en/Doing-World-Heritage-en.html

digital MUSICIANship

New Ways of Making Music in Class



Making music with digital instruments offers new possibilities, which can also be used in school classes. The project explores how digital music-making in groups can be applied in music education and subsequently develops new concepts for music education. Within the framework of the project the students will experiment with different

"I find it extremely thrilling that pupils get the opportunity to put their own research results into practice."

Mag. Dr. Johannes Steiner

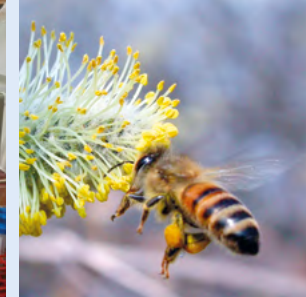
types of digital music-making in music laboratories and compare them with traditional methods of playing music. They will try out themselves how these forms of music can be taught. In a second step the pupils will develop a musical performance together with artists and researchers. The findings form the basis for further music didactical research on digital music-making in groups.

Project leader: University of Music and Performing Arts Vienna (Vienna)

Participating institutions: BG/BRG Wels (Upper Austria)

Duration: October 1st, 2014 – September 30th, 2016

www.sparklingscience.at/en/digital-MUSICIANship-en.html



Sparkling Science Goes Citizen Science

Take part in research! Citizen Science is a research concept which actively involves interested citizens in scientific projects. By volunteering they contribute essentially to science. Within the framework of Young Citizen Science – the first eight pilot projects, which are funded by the Federal Ministry of Science, Research and Economy (BMFWF), started at the beginning of 2015 – it is in particular pupils and other interested youngsters who are

integrated into current research projects. Here you can find a short list of the eight Young Citizen Science pilot projects.

For details of the projects and information about how to take part please see http://www.youngscience.at/project_overview_en



QuakeWatch Austria

The basic project „Schools & Quakes“ investigates seismological activities of the Mürz Valley and the Vienna Basin, involving teenagers in the optimisation of measuring systems, expansion of the network of seismic stations as well as communication and analysis of the seismic data. Other pupils and teachers are involved in the description and quantitative recording of impacts of earthquakes in the Young Citizen Science pilot project “QuakeWatch Austria” via smartphone app and easy-to-use low cost sensors. The aim is a quicker and more precise registration of earthquake sensations and effects of earthquakes in Austria. This information will also facilitate a better assessment of the future earthquake risk.

Project leader: Zentralanstalt für Meteorologie und Geodynamik (ZAMG), Geophysics Department (W)

www.youngscience.at/quake_watch_en



Wasser schafft

In the basic project “PowerStreams” the impact of nutrient contamination and water regulations on the efficiency and sustainability of the self-purification capacity of streams is investigated. In this way it becomes possible to quantify the effect of human influence on the mass balance of watercourses in order to identify possibilities for action for the management of watercourses. The Young Citizen Science pilot project “Wasser schafft”, which is based on the “PowerStreams” project, analyses with the support of the population what effects changes in the character of watercourses have on the water and sediment quality of streams with different degrees of contamination. Participants collect water quality data according to a protocol. This data will be made available for further scientific analysis and publication. The aim is to create a basis for Austria for working out proposals for the management of multi-polluted streams in intensively exploited areas.

Project leader: WasserCluster Lunz (NÖ)

www.youngscience.at/wasser_schafft_en



Young Adults' Political Experience Sampling

Over the past decades young people's motivation to participate in the political process has constantly decreased. However, political participation in particular among the young generation is crucial to a functioning democracy.

The Sparkling Science basic project “FacePolitics” explores in which way politics address young people via Facebook and whether or not this target group can be interested in political topics and participation in this way. In the Young Citizen Science pilot project “YAPES”, which is based on that project, young people are invited to record their political experiences via WhatsApp on a daily basis as citizen scientists. Everything that is politically interesting and relevant for them can be photographed, documented and posted in a quick and simple way. In this way it is investigated which political topics young people are interested in in their everyday lives and how they want to be addressed on the part of politics.

Project leader: University of Vienna, Department of Communication

www.youngscience.at/yapes_en

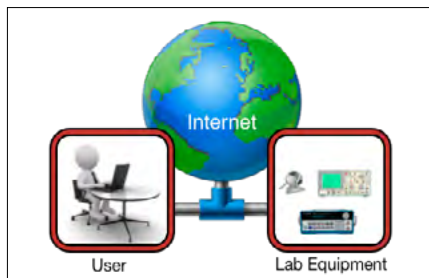


Hedgehogs on their way! Punks in our gardens

The basic project “Nature in your Backyard” explores wildlife gardens, parks and other green areas which play an important role as refugia for species which are on a decline in the modern agricultural landscapes which have been stripped of all shrubs. The Young Citizen Science pilot project, which is based on this project, is dedicated to hedgehogs, which are common in Austrian gardens. By means of placing simple hedgehog tunnels in as many different gardens as possible the prevalence of hedgehogs in gardens can be tracked in cooperation with hedgehog lovers amongst pupils and teachers. In this way data about the presence of hedgehogs is collected all over Austria for the first time and the project results are used for the preparation of recommendations for hedgehog-friendly gardening.

Project leader: University of Natural Resources and Life Sciences, Vienna, Institute of Integrative Nature Conservation Research

www.youngscience.at/hedgehogs_en



Online-Labs4All

Online laboratories enable self-directed and investigative learning and they are ready for use around the clock all over the world. They offer the possibility to carry out experiments via the Internet with real laboratory equipment and to try out theoretical concepts. The novel environment facilitates collaborative working and enables exchange of experiences with other institutions. The Sparkling Science basic project aims at developing adaptive and reusable interfaces for online laboratories. The aim is to integrate laboratory tests into a global cloud on the basis of the novel interfaces which are to be developed, and to evaluate their utilisation. In the framework of the Young Citizen Science element external partners can participate in the online Labs4All Cloud. Via the project website they can give feedback to the developers of the laboratories, carry out scientific experiments and communicate ideas and information.

Project leader: Carinthia University of Applied Sciences

www.youngscience.at/online_labs_en



Who Cares?

To answer the question of "Who will care for whom in the future?" seems to be a challenge. Care, understood in the context of everyday practice, concerns all of us. Taking care of ourselves and others determines our basic wellbeing. Specific situations, such as living with illness, in need of care, or also living with young children, increase the dependency on others. The Sparkling Science basic project therefore investigates how and under which conditions care can work in specific life situations: Who participates in it? Which support networks are helpful? And what can a fair future care culture look like? In the Young Citizen Science element, which is based on this project, pupils, teachers and other interested people are invited to write down their "care and nursing stories".

Project leader: University of Klagenfurt, Institute of Palliative Care and Organisational Ethics, IFF Vienna

www.youngscience.at/who_cares_en



ALRAUNE

The "Alraune" project deals with the causes for the development of allergies. The research focuses on the investigation of the correlations between allergen strain, allergisation and lifestyle. Five hundred pupils from Salzburg already took part in the project and collected valuable data. Within the framework of the Young Citizen Science pilot project other interested people can contribute inputs on the topics of "allergy" and "questionnaire" in an online platform to document the emergence of allergy symptoms and the diagnosis and therapy of allergies in the population in an even more comprehensive way.

Project leader: University of Salzburg, Department of Molecular Biology

www.youngscience.at/alraune_en



Phenology is moving

Phenology investigates the relationship between the seasonal cycle of plants and animals and the seasonal weather conditions. Since plants are very sensitive they react directly to the temperature shifts of the last decades with an increasingly earlier start of the blossoming and fruit ripening seasons. In the basic project "Phenology is moving" youngsters research the effects of weather and climate on the phenology of domestic wild shrubs and agricultural plants. This data is collected from hedges and agricultural crops with are specifically planted on trial sites for this project.

Within the Young Citizen Science pilot project pupils all over Austria observe plants and send pictures of their observations to the Zentralanstalt für Meteorologie und Geodynamik (ZAMG) via app. In this way the participating pupils support for example the study of the autumnal colouring of the leaves.

Project leader: Zentralanstalt für Meteorologie und Geodynamik (W)

www.youngscience.at/farb_verrueckt_en

Sparkling Science research projects funded so far

Natural Sciences

● **Climate Change: The Impact on Native Bird Life:** The impact of climatic parameters on the behaviour and reproduction of native bird species; Project leader (PL): Austrian Academy of Sciences, Konrad Lorenz Institute of Ethology (KLIVV)

● **"Green Chemistry" – Sustainable Strategies in Science:** Sustainable chemical processes including organic, inorganic, and physical chemistry as well as biochemistry, analytics and polymer sciences; PL: Vienna University of Technology, Faculty for Technical Chemistry, Institute of Applied Synthetic Chemistry.

● **Top-Klima-Science:** Hydrologic balance and global change: Future prospects for mountain areas in the face of changes in land use and climate change; PL: University of Innsbruck, Institute of Ecology

● **Alien Invaders – Renaturation of River Banks and Neophytes. A neglected problem:** An investigation into renaturation options and opportunities for creating renaturated spaces in areas populated by neophytes; PL: University of Innsbruck, Institute of Botany

● **Enerkids:** Students research energetic(al) solutions; PL: University College of Teacher Education Vienna

● **WASSERLEBEN:** The development of natural spaces in Mödlingbach (Lower Austria), Krottenbach (Lower Austria) and Schlandraunbach (South Tyrol) after their reconstruction; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Soil Bioengineering and Landscape Construction

● **Science Backstage – Explore How Physics Work and What Physicists Do:** High school students examine how physics research works at the Faculty of Physics, University of Vienna, what research methods are used as well as how scientific communities co-operate. The research groups involved in this course include quantum optics, nano materials and nuclear physics; PL: University of Vienna, AECC Physik (Austrian Educational Competence Centre Physics)

● **The Rottenburg – A historically important fortress from an interdisciplinary point of view:** The Rottenburg: its historical importance, the origins of the building materials used and the history of its construction – an interdisciplinary project bringing together the fields of natural sciences, humanities and building research with active participation of schools; PL: University of Innsbruck, Department of Archaeologies

● **WESPe:** Wetlands, Environment, Society and Pressures: Effects of environmental changes on the ecological and social functions of riverine wetlands; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Hydrobiology and Aquatic Ecosystem Management

● **Black C: Butterfly Caterpillar Research:** Research on butterfly larvae hibernating in the spring meadows of the Lainzer Tiergarten recreation area and their contribution to biodiversity and population dynamics; PL: Austrian Research Centre for Forests

● **Regeneration of Free-Living Flatworms:** Comparative studies on the regenerative capacity of free-living freshwater flatworms in Tyrol; PL: University of Innsbruck, Institute of Zoology, Department of Ultrastructure Research and Evolution Biology

● **meteoPICS:** Students develop the photographic foundations for an archive on extreme weather phenomena; PL: Zentralanstalt für Meteorologie und Geodynamik, Customer Service for Salzburg and Upper Austria

● **RECYCLING THE GREEN – or „How & where does the chlorophyll disappear?“:** In search of traces of the green leaf pigment: An investigation of the autumnal turning of leaves and its concurrent chlorophyll breakdown in local plants; PL: University of Innsbruck, Institute of Organic Chemistry

● **The Year of the Greylag Geese:** Seasonal beha-

vioural differences of male and female Greylag geese (*Anser anser*) from different social categories; PL: Konrad Lorenz Research Centre for Ethology

● **Precipitation – Forests – Wine in the Weinviertel:** Variability of precipitation and the influence on forests and agricultural yield in the Weinviertel in the past, present and future; PL: University of Natural Resources and Life Sciences, Vienna, Department of Wood Research

● **Birds as Biological Indicators:** Long-term (international) large-scale collection of bird data serving as indicators for environmental changes; PL: University of Veterinary Medicine Vienna, Konrad Lorenz Institute of Ethology

● **Why should I care about Atmospheric Particulate Matter?:** Characterisation of ambient and indoor atmospheric particulate matter samples from emission monitoring and indoor spaces with regard to their aerosol sources and their role as triggers for "oxidative stress"; PL: Vienna University of Technology, Institute of Chemical Technologies and Analytics.

● **Alpine Salamanders:** A survey of the distribution of alpine and fire salamanders in Salzburg; PL: University of Salzburg, Molecular Biology

● **GrassClim:** Interactive effects of climate change and management on the yield and carbon dioxide source/sink strength of grasslands; PL: University of Innsbruck, Institute of Ecology

● **Forest Check:** Forests in Focus – Geoinformation technology for small-scale forest assessments and inventories; PL: University of Innsbruck, Institute of Ecology

● **TriPolar:** Microbial life in the atmosphere – an extreme habitat as an analogue to exoplanets; PL: University of Innsbruck, Institute of Ecology

● **Human Attitudes towards Wolves and Dogs:** Attitudes of different segments of people living in Eastern Austria towards wolves and dogs; a questionnaire and behavioural survey; PL: Wolf Science Center Ernstbrunn (WSC)

● **Alpine Salamanders II:** Alpine and fire salamanders in Austria and Europe; review of the current situation and protective measures; PL: University of Salzburg, Organismic Biology

● **Viel-Falter (Butterfly Diversity):** Development and evaluation of a survey system for butterfly habitats situated close to human settlements; PL: University of Innsbruck, Institute of Ecology

● **AlmWaal:** Irrigation of Meadows and Pastures in the Alpine Cultivated Landscapes – Importance of an ancient cultivation technique for biodiversity and mountain pasture; PL: eb&p Umweltbüro GmbH, Klagenfurt

● **ON THE ROAD:** Young people travelling through the world of science and everyday life; PL: University of Natural Resources and Life Sciences, Vienna, Institute for Transport Studies

● **Pollen Allergies and (Atmospheric) Particulate Matter:** Pollen and particulate matter – joint allergy triggers?; PL: University of Graz, Institute of Molecular Biosciences

● **ALRAUNE:** Allergy Research in Rural, Alpine, and Urban Networks; PL: University of Salzburg, Molecular Biology

● **FlussAu:WOW!:** Identifying and understanding river landscape processes based on innovative geo-data; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Hydrobiology and Aquatic Ecosystem Management

● **McKyoto:** Biocultural diversity, climate relevance and health impacts of young people's eating habits; PL: University of Natural Resources and Life Sciences, Vienna, Division of Organic Farming, Working Group Knowledge Systems & Innovation

● **Functional Food for Cows – Added-value as nutritional value:** Scientists and students working together to enhance the functional properties of grains fed to dairy cows; PL: University of Veterinary Medicine, Vienna, Institute of Animal Nutrition and Functional Plant Compounds

● **Sparkling Geomagnetic Field:** Geomagnetic variations during the upcoming solar maximum: Causes and regional consequences; PL: Zentralanstalt für Meteorologie und Geodynamik, Conrad Observatory

● **INDIAN SUMMER IN TYROL – The turning of autumn leaves in Tyrol's Alpine regions:** Students look for different types and forms of aging processes in Tyrol's Alpine flora; PL: University of

Innsbruck, Institute of Organic Chemistry ● **CAVE.LIFE**: Ice caves as glacial refuges for microorganisms and their non-invasive investigation; PL: University of Innsbruck, Institute of Ecology ● **Chemical Defences in the Animal Kingdom**: Common Toads: The use of skin gland secretions for biochemical defence against predators among common toads (*Bufo bufo*) – Plasticity and costs in the light of climate change; PL: University of Veterinary Medicine, Vienna, Konrad Lorenz Institute of Ethology ● **Wood for Salt**: The prehistoric Hallstatt salt mine and its work routines; PL: Natural History Museum Vienna, Prehistory Department ● **Forest – Timber – Raw Material**: Analyses of the historical wood utilization with the help of objects from the Austrian Open Air Museum Stübing; PL: University of Natural Resources and Life Sciences, Vienna, Department of Wood Research ● **Pech gehabt! – Investigations on *Pinus nigra* with and without tapping**: Natural and anthropogenic effects on wood properties; PL: University of Natural Resources and Life Sciences, Vienna, Department of Wood Research ● **AiR**: Trace gas Analysis in an Inner-Alpine Region; PL: University of Innsbruck, Institute for Ion Physics and Applied Physics ● **Amphibians and Reptiles in Human Areas of Settlement**: Survey of the situation of endangered domestic amphibian and reptilian populations in human settlement areas of Southern Styria; PL: Universalmuseum Joanneum, Centre of Natural History, Zoology ● **BIO KoSMoS**: Allergy vaccines and ink for BioArt: Proteins for artistic and medical applications will be generated by scholars together with researchers, using biotechnology; PL: University of Salzburg, Molecular Biology ● **COVER. UP**: Blanking over glacial surfaces with industrial fleece to reduce melt rates. Economic blessing or scientific curse? A socio-political and scientific symbiosis; PL: University of Innsbruck, Institute of Ecology ● **CSI: TRACE your FOOD!**: Determination of provenance of food from regional production in Austria on the basis of multi-element and isotopic fingerprinting; PL: University of Natural Resources and Life Sciences, Vienna, Department of Chemistry, Division of Analytical Chemistry, VIRIS Laboratory ● **A New Rainforest**: Understanding trees to protect climate and biodiversity; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Botany ● **A Sweet Treat for Cows**: A sweet treat for cows? Investigation of a healthy and sustainable feeding strategy; PL: University of Veterinary Medicine Vienna, Institute of Animal Nutrition and Functional Plant Compounds ● **ELWIRA**: Plants, wood, steel, concrete – a lifecycle as construction materials; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Soil Bioengineering and Landscape Construction ● **EMMA**: Experimentation with mathematical algorithms; PL: University of Salzburg, Department of Mathematics ● **Glaciolive**: How are the glaciers? Development of a near-real-time information system of the current state of the glaciers in the Sonnblick area; PL: Zentralanstalt für Meteorologie und Geodynamik ● **Small animals also need dung!**: Small animals also need dung! The effect of different fertilisation types on invertebrates and plants in cereal fields; PL: University of Innsbruck, Institute of Ecology ● **Nature in your Backyard – Citizen Science for Schools**: Enjoy, explore and protect biodiversity; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Integrative Nature Conservation Research ● **Phenology is moving**: Impact of weather and climate on the phenology of indigenous woody plants and arable crops; PL: Zentralanstalt für Meteorologie und Geodynamik, KS Klima Ost ● **Fruit & Tree**: Biodiversity and Local Knowledge in Traditional Orchards; PL: Arche Noah association ● **Pollen Allergy and Particulate Matter 2**: Pollen and particulate matter – joint allergy triggers?; PL: University of Graz, Institute of Molecular Biosciences ● **PowerStreams**: The self-purification capacity of streams under the pressure of increasing nutrient pollution;

PL: WasserCluster Lunz ● **Schools & Quakes**: Schools extend our knowledge of local earthquakes; PL: Vienna University of Technology, Department of Geodesy and Geoinformation ● **SOLARbrunn – powering the future with the sun?**: Pupils, scientists and regional stakeholders develop a concept for the implementation of the vision „green community“ Hollabrunn with a focus on photovoltaics; PL: University of Vienna, Faculty of Physics ● **Social alliances and flying area in Northern Bald Ibis (*Geronticus eremita*)**: Quo volis *Geronticus eremita*? Monitoring the social alliances and the flying area in the Northern Bald Ibis (*Geronticus eremita*) colony in Grünau; PL: University of Vienna, Core facility KLF for Behavioural and Cognition Biology ● **Traisen.w³**: Identifying and perceiving of river landscape functions and understanding of catchment processes on the example of the river Traisen; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Hydrobiology and Aquatic Ecosystem Management ● **Wood from the „Waldviertel“ region**: Wooden buildings in the Waldviertel-region – 500 years of know-how for the future; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Wood Science and Technology ● **water@school**: Development of a water safety plan and determination of the water balance in a school building taking into consideration seasonal usage patterns; PL: AIT Austrian Institute of Technology GmbH ● **Woody Woodpecker**: Wood-anatomical analyses of conifers at the alpine timberline; PL: University of Innsbruck, Institute of Botany

Technology

● **Engineer Your Sound! (EYS)**: Participatory technological design using the example of music; participation of secondary school students in the development of didactic concepts of an interdisciplinary technical training; PL: Inter-University Research Centre for Technology, Work and Culture (IFZ) ● **Young Researchers: Traffic & Safety**: Survey and scientific analysis of traffic- and safety-related parameters by students; PL: Vienna University of Technology, Institute of Mechanics and Mechatronics. ● **Virtual Product Development**: Cooperative mechatronic product development in schools and universities using a PDM system; PL: Vienna University of Technology, Institute for Engineering Design and Logistics Engineering. (IKL) ● **Ecoproduct for Youth**: Development of a method for the sustainable assessment of products for young people; PL: Vienna University of Technology, Institute for Engineering Design and Logistics Engineering, Research area Ecodesign ● **Intelligent Mobility Support – Mobile Motion Advisor**: Development of technological methods and their practical use for supporting the individual physical fitness of adolescents in school and leisure-time athletic activities; PL: University of Vienna, Centre for Sports Science and University Sports, Department for Biomechanics, Kinesiology and Applied Computer Science ● **Production of Multi-Channel-Capillary Membranes**: Development and assembly of units for the production of multi-channel-capillary membranes for improved product separation and cost reduction; PL: MCI – Management Center Innsbruck ● **GEOSOL**: Success factors for solar micro-heat grids with seasonal geothermal heat storage; PL: Vienna University of Technology, Institute of Energy Systems and Electrical Drives, Energy Economics Group ● **PDM-UP – Expansion and sustainable establishment of a Product Data Management platform developed and implemented in the course of its predecessor project**: A product data management platform as an IT system to support education at HTLs as an interdisciplinary field for cross-school collaboration; PL: Vienna University of Technology, Institute for Engineering Design ● **SCWTEX** –

Cutting and Welding of Textiles by Means of a Laser: Simultaneous cutting and welding of textiles – Development of a combined cutting-welding process of textiles by use of a laser; PL: Vienna University of Technology, IFT Institute for Production Engineering and Laser Technology • **Pulsed Lasers:** Development and construction of a pulsed laser for the marking and cutting of various materials; PL: Vienna University of Technology, Institute for Production Engineering and Laser Technology, Laboratory for Laser Technology and Forming Technology • **Mobile Motion Advisor 2.1:** Accompanying project of “Intelligent Mobility Support – Mobile Motion Advisor” focusing on adaptation for practicable application in school sports; PL: University of Vienna, Institute of Sports Science, Department of Biomechanics, Kinesiology and Applied Computer Science • **FRANC – Field Robot for Advanced Navigation in Bio Crops:** Development of a field robot with an advanced navigation system for organic farming; PL: Vienna University of Technology, Institute of Automation and Control • **Hybrid Wood Constructions:** Development of timber-steel-hybrid elements for economically and ecologically sustainable mixed timber structures for compact construction in urban areas; PL: Vienna University of Technology, Institute of Architectural Sciences, Structural Design and Timber Engineering • **RoboConT-Terminal:** Development of an interactive robot container terminal model to make infrastructures of sustainable intermodal goods transport come alive and comprehensible; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Production and Logistics • **RIO+20 anniversary project: RIOSOLAR:** Students develop milestones for Austrian solar thermal energy and photovoltaic research and explore fields of development for solar technologies until 2030 as a contribution to sustainable development processes as defined by RIO+20; PL: Vienna University of Technology, Institute of Energy Systems and Electrical Drives, Energy Economics Group (EEG) • **Wood-based hybrid ribbed slabs:** Development of timber-steel hybrid elements for economically and ecologically sustainable mixed timber structures for compact construction in urban areas; PL: Vienna University of Technology, Department of Architectural Sciences: Structural Design and Timber Engineering • **FEMTOLAS:** Shorter than the blink of an eye – Simulation of femtosecond lasers for material processing; PL: Vienna University of Technology, Institute for Production Engineering and Laser Technology. • **Online-Labs4All:** Adaptive Interfaces for a global iLab Cloud; PL: Carinthia University of Applied Sciences • **Systems Engineering – Innovative products through integrative education and training concepts:** Systems Engineering as an integrative approach to the methodological design and IT support of interdisciplinary processes for the development and design of innovative products; PL: Vienna University of Technology, Mechanical Engineering Informatics • **Valuable Wood:** Big shrubs and small trees as a valuable and sustainable resource of wood; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Wood Technology and Renewable Materials

Computer Sciences

• **FUNSET Science (Future Network-Based Semantic Technologies):** Concepts for the application of semantic and software agent technologies in small- and medium-scale enterprises to create network organizations; PL: Vienna University of Technology, Institute of Automation and Control • **fe|male:** Students design technology-supported learning scenarios; PL: University of Krems, Department of Interactive Media and Educational Technologies • **“Applications on the Move”:**

Development of a mobile gaming application for young people in the field of location-based gaming; PL: Carinthia University of Applied Sciences, Study area Geoinformation • **Sparkling Fingers:** Development of a haptic e-learning instrument in cooperation with blind and severely visually impaired students; PL: Vienna University of Technology, Institute of Design and Assessment of Technology • **trans.eco.compare:** Development of an interactive learning tool for an ecological and economical comparison of different modes of goods transport; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Production and Logistics • **XINU-Control:** eXcellent Interface for nonhaptic use; PL: Vienna University of Technology, Institute of Computer Technology • **QUASSUMM:** Quality Assessment and Enhancement of User-Generated Mobile Multimedia Content; PL: University of Vienna, Faculty of Computer Science, Entertainment Computing Research Group • **Sparkling Fingers 2.0:** User-participatory development of an audio-tactile-learning tool for blind and severely visually impaired students based on an open framework extensible by modules for the generation and utilisation of collaboratively prepared online content; PL: Vienna University of Technology, Institute of Design and Assessment of Technology • **GeoWeb:** Geographic information systems based on OpenStreetMap and Google Maps-API; PL: Salzburg University of Applied Sciences, degree programmes Information Technology & Systems Management (ITS) and Forest Products Technology & Timber Construction (HTB) • **Sensors4All:** Acquisition of micro-climatic data for the area of Villach with special emphasis on the sustainable correction of raw data supported by open-source software and standards; PL: Carinthia University of Applied Sciences • **AAS Endurance – Robotic Sailing Boat:** A robotic sailing boat for marine mammal research; PL: INNOC – Austrian Society for Innovative Computer Sciences • **DISBOTICS – Disassembly Robotics:** Distributed and intelligent disassembly of products using mobile robots; PL: Vienna University of Technology, Institute of Automation and Control (ACIN) • **OpenPOI:** A web-based portal to collect and reuse free points-of-interest data; PL: Carinthia University of Applied Sciences • **Games4School – Researchers develop games together with, and for, school children:** Following the principle of user-centred design, school children develop mini games with new interaction possibilities in cooperation with researchers and teachers; PL: University of Salzburg, ICT&S Center • **ACTO:** Evaluation of Modular Actuated Tangible User Interfaces; PL: Vienna University of Technology, Institute of Software Technology and Interactive Systems • **Speech Synthesis of Audio Textbooks for Blind Students – SALB:** PL: Telecommunications Research Center Vienna • **4 W Information Integration:** What We Want To Know: Collaborative information integration supported by intelligent software; PL: Graz University of Technology, Institute for Information Systems and Computer Media • **BlindBits:** An accessible level editor and player for creating orientation training games for blind students; PL: AIT Austrian Institute of Technology GmbH • **Informatics – Child’s play?!** PL: University of Klagenfurt, Department for Informatics Systems • **Sparkling Games:** Designing educational games related to computer sciences and society; PL: Vienna University of Technology, Institute of Design and Assessment of Technology. • **The Profiler:** Development of a profiling tool to describe persons based on acquisition and content-based analysis of personal online images to improve media skills of 10- to 15-year-olds; PL: Vienna University of Technology, Institute of Computer-Aided Automation, Computer Vision Lab

Medicine and Health

● **Searching for Carbon Footprints in the Classroom Atmosphere:** High school students, teachers, and scientists investigate climate conditions in classrooms looking for correlations between heat and student performance; PL: University of Natural Resources and Life Sciences, Vienna, Department of Water – Atmosphere – Environment, Institute of Meteorology (BOKU-Met) ● **Physical activity catches on:** Immunological and metabolic profile of students with regard to their physical activity and levels of performance; PL: University of Vienna, Centre for Sports Science and University Sports, Sport and Exercise Physiology ● **FIT, NOT FAT:** Cooperatively developing and implementing a project designed to survey the state of health and to promote health awareness of Viennese high school students based on an intervention study in co-operation with the hospital of Hietzing; PL: Karl Landsteiner Institute for Metabolic diseases and Nephrology, Hietzing Hospital, Vienna ● **Handball:** Physical stresses caused by jump shots in handball – a biomechanical analysis; PL: University of Veterinary Medicine, Vienna, Working Group for Motion Analysis ● **FEM_TRACE:** Development of trace gas analysis screening tests; PL: Austrian Academy of Sciences, Breath Research Institute ● **JIBB:** Jugend is(s)t berichtend in Bewegung – Health reports prepared by students for students; PL: University of Applied Sciences Joanneum Graz ● **My Heart and I – Healthy Together!:** Evaluation of a cardiovascular health promotion pilot project by the Fonds Gesundes Österreich in community and school settings for a cooperative development of capacity building and the implementation of school health promotion interventions at the ECOLE-HBLW Güssing; PL: FH Burgenland University of Applied Sciences ● **Give me a break, please!:** Reloading my batteries: Adolescents document and investigate locations for restoring their cognitive abilities; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Landscape Development, Recreation and Conservation Planning ● **FEM_PERS:** Development of personalised medical breath tests for women; PL: University of Innsbruck, Breath Research Institute ● **FEM_BREATH:** Breath tests for personalized medicine; PL: University of Innsbruck, Breath Research Institute ● **Tendon Regeneration versus Tendon Repair:** Tendon injuries – scarring repair and scar-less regeneration; PL: University of Veterinary Medicine, Vienna, Equine University Clinic, Clinical Unit of Equine Surgery ● **Tendon Engineering:** The Elastic Tendon: Development of a novel tissue bioreactor for the cultivation of tendons; PL: Paracelsus Private Medical University ● **Tendons and Nutrition:** The influence of diet on the musculoskeletal system; PL: Paracelsus Private Medical University

Social Sciences

● **(Un)Doing Gender as a Living Principle of Education:** Language – Politics – Performance: How gender relations and roles are constructed, designed and lived – an investigation of young researchers and teachers in the context of German classes; PL: University of Vienna, Gender Research Office and Centre for German Language Teaching, Department of German Studies ● **MeTeOr:** The influence of new media and technologies on the value orientation of adolescents; PL: University of Applied Sciences Upper Austria ● **SKY:** Self-Confidence and Competence for the Young People!: A systematic study of e-interventions in the context of self-assurance training; PL: Komm-Mit-Ment association ● **Investigating intercultural backgrounds:** Young researchers research migration history/ies: An investigation of historical per-

ceptions of young people in culturally heterogeneous school classes; PL: Democracy Centre Vienna ● **Tricks of the Trade. Social field research with young researchers:** Young researchers and scientists research places of learning and knowledge together; PL: Science Communications Research Wien ● **Youth@Risk:** Perception of risk by adolescents – risks from the perspectives of adolescents, science, and media; PL: Institute for Pharmacoeconomic Research, Vienna (IPF) ● **Cross-Cultural Competence:** Promotion of cross-cultural competence in high schools providing vocational education in Austria; PL: University of Applied Sciences Upper Austria, Intercultural Centre at the Global Sales Management degree programme ● **My Featured Space 2025:** Young researchers in the Alps-Adriatic Region analyse and design their future living spaces in rural regions using networked methods; PL: eb&p Umweltbüro GmbH ● **Picture.it:** Young people develop and design gender-sensitive images of people and technology. A participatory technology research project to compile a non-sexist image database; PL: IFZ Inter-University Research Centre for Technology, Work and Culture, Graz ● **MY LIFE – MY STYLE – MY FUTURE:** Sustainable lifestyles and adolescent life realities; PL: Austrian Institute for Sustainable Development, ÖIN e.V. ● **Media Garden – BAKIP Meets Science:** Qualitative media research conducted by future kindergarten teachers in their practice kindergartens; PL: University of Vienna, Faculty of Philosophy and Education, Department of Education ● **Diversity of Cultures – Unequal City:** A transdisciplinary research project on urban development, social cohesion, and transculturality; PL: KommEnt, Paulo Freire Center for Transdisciplinary Development Research and Dialogical Education ● **GEOKOM-PEP:** Geo-visualisation and communication in participatory decision processes; PL: Austrian Academy of Sciences, Institute for GIScience ● **Lifelong Learning – Students' and Scientists' Joint Perspectives:** Lifelong Learning – Young researchers and scientists discussing lifelong learning (LLL): Developing questionnaires, collecting data, and formulating recommendations for promotion activities; PL: University of Vienna, Faculty of Psychology, Department of Applied Psychology: Work, Education and Economy ● **Women and Competition:** Experimental studies of the discrimination of women during their careers; PL: University of Innsbruck, Institute of Financial Studies ● **GLO-PART:** Youth participation in local politics. Adolescent perceptions of, and interventions in, Europeanized and globalized politics; PL: University of Vienna, Department of Political Science ● **Peer Violence – Teenagers' perception of youth violence:** Teenagers' perception toward youth violence and violence interventions and its dependency on gender and migration background; PL: University of Applied Sciences Campus Wien, Competence Centre for Social Work GmbH (KOSAR) ● **Racism in Online Forums Discussing Migration and Education:** migration.macht.schule; PL: University of Vienna, Department of Linguistics ● **JuMuW [You move]:** Youth research workshop on multicultural Vienna. An interdisciplinary research project on intercultural learning and multicultural environments for teenagers and by teenagers in Vienna; PL: University of Vienna, Department of Social and Cultural Anthropology ● **YouTest – Young People and Genetic Testing:** Young people participating in technological impact assessments: Direct-to-consumer genetic analyses as an example; PL: dialog<>gentech ● **Nano Materials – Chances and Risks of a New Dimension:** Nano materials, their inherent opportunities and risks focusing on research of, and with, young people including gender aspects; PL: Environment Agency Austria ● **LIFE eQuality?:** Teenagers researching quality of life – A comparative interregional study; PL: University of Innsbruck, Institute of Geography

● **ABLE YOUTH:** SustainABLE energy YOUTHERs – Active research for a more sustainable energy use; PL: Austrian Institute for Sustainable Development ● **Catch me if you can:** Shoplifting by children and juveniles – Determinants and prevention; PL: University of Applied Sciences Upper Austria ● **(Do) students develop school!?:** Students and student representatives as co-actors of school development and system reform; PL: University of Linz, Institute of Education and Psychology, Department of Education Science and Education Psychology ● **I AM HERE!** Participatory approaches to analyse the behaviour of adolescents in urban environments; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Landscape Development, Recreation and Conservation Planning ● **Migration(s) in Textbooks:** A critical analysis by students, teachers and researchers; PL: Ludwig Boltzmann Institute for European History and Public Spheres ● **"A Right to Human Rights Education!"** – Qualitative evaluation of human rights education in grammar schools (AHS); PL: European Training and Research Centre for Human Rights and Democracy (ETC) ● **Re-Thinking and Advancing Education Together:** Learning through research in elementary pedagogics training and practice; PL: University of Graz, Department for Education, Working Group Elementary Education ● **GIVING VOICE – Inclusion through Political Parties?:** An intersectional analysis of descriptive representation based on candidate lists for parliamentary elections in Austria; PL: University of Vienna, Department of Political Science ● **Landscape and You-th – An oral history project on local knowledge, language and landscape:** Interactions between people and landscapes on the example of flax cultivation and processing in the Carinthian Lesach Valley; PL: University of Klagenfurt-Wien-Graz, Department of Intervention Research and Cultural Sustainability ● **Cross-Border Experiences:** Field research with students; PL: Science Communications Research ● **The Secret Life of the Neighbourhoods:** Young researchers write urban history; PL: University of Vienna, Department of Sociology ● **Paternity leave:** Paternity leave – Impacts on male careers; PL: Joanneum Research POLICIES ● **KidsAct:** Children explore the interactions between car drivers and young road users in street traffic; PL: Factum Chaloupka & Risser OG, Vienna ● **BrotZeit:** Lesachtal bread in an intergenerational dialogue; PL: University of Klagenfurt-Wien-Graz, Department for Intervention Research and Cultural Sustainability ● **Critical Science Literacy:** Why science isn't simply true, what that has to do with you and how you can change it; PL: University of Vienna, Department of Political Science ● **FacePolitics:** Political participation possibilities for pupils in interactive social media such as Facebook; PL: University of Vienna, Department of Communication ● **Inclusive Spaces:** Students explore their school's social spaces at 'new secondary schools' in the context of inclusion; PL: queraum. cultural and social research ● **Young People Explore Children's Rights (JeKi):** A multi-perspective approach to generations, school, vocational education and training and higher education; PL: Carinthia University of Applied Sciences ● **PEARL:** Interns investigate their work and learning: Exemplarily shown for business internships of students at Austrian vocational colleges; PL: University of Innsbruck, Institute of Organisation and Learning ● **SUSTAINABLE CARE:** Nursing students explore potentials for sustainable care; PL: University of Klagenfurt, Institute of Palliative Care and Organisational Ethics, IFF Vienna ● **Think Spatial!:** Adolescents develop and test tools for spatial and visual research and learning; PL: University of Natural Resources and Life Sciences, Vienna, Institute of Landscape Development, Recreation and Conservation Planning ● **From „User-Generated Content“ to a „User-Generated Copyright“:** Requirements a modern copyright is

facing in the digital environment; PL: Vienna University of Economics and Business, IT/IP Law Group ● **Who cares?:** Scenarios for a trendsetting culture of care; PL: University of Klagenfurt, Institute of Palliative Care and Organisational Ethics, IFF Vienna ● **The Art of Sustainable Living:** Discover – understand – re-design new concepts of sustainable living; PL: IDRV – Institute of Design Research Vienna

Humanities

● **Mrs. Munde's Deadly Sins:** Topicality and history of the Tyrolian popular drama on the example of the Exl-Bühne and the Tiroler Volksschauspiele Telfs; PL: University of Innsbruck, Research Institute Brenner Archives ● **The Heilandskirche in Graz 1938 to 1945:** The Heilandskirche in Graz during National Socialism with a special focus on its members persecuted as Jews; PL: University of Graz, Centre for Jewish Studies ● **Right in the Middle of Vienna's Second District – The past and present seen from a student point of view:** Students from the second district of Vienna investigate the history and present of their school. A historical-cum-empirical comparative analysis of schools of the second district with different cultural and social backgrounds involving students and teachers as researchers; PL: University of Vienna, Faculty of Philosophy and Education, Department of Education ● **Our Environment Has a History:** Young researchers in search for the roots of our environmental problems; PL: University of Klagenfurt, Faculty for Interdisciplinary Research and Further Education, Institute for Social Ecology, Centre for Environmental History ● **A Dialogue with Antiquity – Inscriptiones Antiquae:** A scientific and didactic review of the largest collection of urban Roman inscriptions in Austria; PL: University of Innsbruck, Department for Ancient History and Ancient Oriental Studies ● **Transnational Perceptions of History:** "And what does that have to do with me, anyway?" Transnational perceptions of the National Socialist past; PL: trafo.K association ● **"Where have all the Jews gone?":** Using St. Pölten as an example. Migration and present times, displacement and memory; PL: Institute for Jewish History in Austria (INJOEST) ● **DESA:** A German-English dictionary of social work; PL: Carinthia University of Applied Sciences, Area of study: Social Work ● **The Jewish Cemetery of Graz:** Exploring – Conserving – Remembering: A contribution to the social and cultural history of the Jewish community of Graz during the 19th and 20th centuries; PL: University of Graz, Centre for Jewish Studies ● **Like Seen on the Screen:** The media and our environment; PL: Ludwig Boltzmann Society, Institute for History and Society, History Cluster ● **ALIENA:** A new aesthetisation of medieval literature in the experience space; PL: University of Salzburg, German Language and Literature ● **Looking for Traces – Hall in Motion:** Field research and exhibition on labour migration in the region of Hall in Tyrol (1960s up to today); PL: University of Innsbruck, Department for Contemporary History ● **The End of (my) Childhood?:** Rescuing Jewish children from Austria 1938 - 1941; PL: Institute for Jewish History in Austria (INJOEST) ● **"De-registered?":** The forced displacement of the Jews of St. Pölten to collective flats in Vienna, 1938-42; PL: Institute for Jewish History in Austria (INJOEST) ● **Doing World Heritage – Grasping World Heritage:** Objects and narratives in the context of the UNESCO World Heritage of prehistoric pile dwellings; PL: Natural History Museum Vienna, Prehistory Department ● **Melting Pot!?:** Socio-spatial restructuring processes in Ottakring; PL: Kreisky Archive ● **Metropolis in Transition:** Vienna – Budapest 1916-1921; PL: Ludwig Boltzmann Society (LBG), Ludwig Boltzmann Institute for European History and Public Spheres ● **My**

Literacies: Approaches to literacies in multimodal and multilingual contexts – The view of the child; PL: University of Vienna, Department of Linguistics

Learning and Instruction

● **Opinion Corner – Your opinion counts (OC):** Secondary school students develop an online panel for young people; PL: University of Linz, Institute of Education and Psychology ● **SCHNAU – Pupils develop natural science study assignments:** Secondary school students develop learning assignments for natural sciences in cooperation with subject teachers, especially taking into account the research fields “different learning styles” and “gender aspects”; PL: University College of Teacher Education Carinthia – Viktor Frankl College, Centre for Natural Science Teaching ● **KiP – Kids’ Participation in Educational Research:** Inquiring learning in life science research projects – a subject-didactic research and development project; PL: University of Vienna, Austrian Centre for Biology Teaching (AECC-BIO) ● **Cross-Age Peer Tutoring in Physics:** By studying with junior peers, young researchers investigate their perceptions of physics concepts and adapt their own cognitive structures based on new insights; PL: University of Vienna, Austrian Educational Competence Centre Physics, AECC Physik ● **KiP2:** Kids’ Participation in Research: Students join scientists to conduct research on selected biological topics and science education; PL: University of Vienna, Austrian Educational Competence Centre Biology, AECC-BIO ● **Facing the Differences:** Contradictions and differences as a constitutive moment of professional pedagogic self-images; PL: University of Graz, Department for Educational Sciences ● **eLearning in physical education and physics classes:** Development and implementation of a blended learning concept for (competitive) sports-oriented students based on learning objects; PL: University of Vienna, Centre for Sport Science and University Sports, Institute of Sport Science, Department of Biomechanics, Kinesiology and Applied Computer Science ● **Playful Learning:** Research of motivational aspects and knowledge transfer in digital educational games for children aged 10 to 14 years; PL: Danube University Krems, Subject area “Applied Game Studies”, Department for Image Science ● **Ethics & Health:** Education beyond normalising appreciation; PL: University of Vienna, Department of Philosophy ● **Comprehensive Learning through Concept Cartoons:** “Concept cartoons” as a surveying method to identify alternative pre-conceptions in students and as a guide to teaching a student-focussed chemistry class; PL: University of Vienna, Austrian Educational Competence Centre Chemistry (AECC Chemistry) ● **An Educational Toolbox in Conjunction with the ‘Steirische Literaturpfade des Mittelalters’ (Styria’s Literature Paths of the Middle Ages):** New concepts and materials for imparting older German texts; PL: University of Graz, Study area: German language and literature of the Middle Ages ● **You feel, I hear, we make music – a dialogue:** The development of adequate models for inclusive and integrative contexts for teaching heterogeneous groups; PL: University of Music and Performing Arts Vienna, Hellmesberger Department ● **Individual – Collective:** A reflection on aesthetic/social interactions using the example of an improvised music theatre production of Vinko Globkar’s score “Individuum – Collectivum” (1979); PL: Mozarteum University Salzburg, Department of Music Education Salzburg ● **Psychomotility in School:** Development, application and evaluation of psychomotor teaching and learning methods in primary and secondary schools; PL: University of Vienna, Department for Sport Science and University Sports, Sports Sociology division ● **KiP3:** Kids’ Participation in Research – Authentic research-based learning

in biological research projects (development and implementation); PL: University of Vienna, AECC Biology ● **Cross-Age Peer Tutoring in Physics 2:** The school-university interface; PL: University of Vienna, AECC Physics ● **A Net Compass for Social Webs:** A peer-to-peer information platform for privacy and data protection in social webs; PL: University of Applied Sciences Upper Austria, School of Informatics, Communications and Media, Hagenberg ● **Working materials 2.0 for the Medieval Styrian Literature Paths:** How to convey medieval texts in a medially shaped area of tension between spoken language, written language and memory; PL: University of Graz, Institute for German Studies ● **digital MUSICIANship:** New ways of making music in class; PL: University of Music and Performing Arts Vienna, Department of Music Education ● **FAME:** Fostering Autonomy and Motivation by introducing E-Tandems into formal foreign language education; PL: University of Vienna, Centre for Teacher Training, Unit for Language Learning and Teaching Research ● **InMeLi:** Development of a tool for surveying and reflection of media literacy and media habitus at schools; PL: University of Vienna, Faculty of Philosophy and Education ● **Music without frontiers:** Multilingualism in music (bi- or multilinguality) and the understanding of the „other“, the „unfamiliar“; PL: University of Music and Performing Arts Vienna, Franz Schubert Department

Sparkling Science >

Science linking with School

School linking with Science

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