Solid Structures: Award-winning ESD up close

A tour of award-winning learning spaces, networks and local authorities in the UNESCO Global Action Programme on Education for Sustainable Development
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From metropolitan Hamburg to rural Mecklenburg, Education for Sustainable Development is on the map throughout Germany. After four successful rounds of awards under the UNESCO Global Action Programme on Education for Sustainable Development (ESD), this publication presents a range of exemplary ESD initiatives. Since 2016, the Federal Ministry of Education and Research and the German Commission for UNESCO have conferred awards on initiatives that stand out for excellent implementation of ESD. Five such initiatives were visited by the German Commission for UNESCO in 2019.

The five initiatives are located in various regions of Germany. They represent a range of education sectors: formal and informal, technical and vocational education and training, school and early childhood education. One thing they have in common however is the tremendous motivation to empower people for sustainable and responsible action.

The first-hand experience from visiting the initiatives has been transferred into five profiles that show how ESD works in concrete terms. What facets of sustainable development do they focus on and what approaches do they use? What factors help implement ESD? What are the challenges and how can they be surmounted? The profiles provide a wide range of interesting answers to these questions.

Education for Sustainable Development

ESD enables people to make decisions for the future and assess how their actions affect future generations or life in other regions of the world. It takes account of social, economic and environmental dimensions of sustainable development.

ESD is at its most effective when initiatives and institutions work holistically and address all facets of sustainability. The Whole Institution Approach is therefore a central quality attribute of good practice in ESD. Exemplary ESD initiatives stand out for the following criteria:

- Clear management: Management-level commitment to and responsibility for ESD, designated liaison officers and full stakeholder involvement
- Quality improvement: Development and application of monitoring and self-assessment tools
- Youth: Youth participation in ESD development, implementation and quality improvement
- Teaching and learning: Holistic, competency-oriented education approach
- Further education and training: Structured ESD competency development for staff
- Operations: Sustainability-oriented catering, procurement and resource use
- Innovation and networking: ESD as transformation and change driver, partnering with and advising other institutions
- Communication: Regular internal and external communication on ESD

SDG 4.7

... by 2030, ensure all learners acquire the knowledge and skills needed to promote sustainable development, including among others, through Education for Sustainable Development and sustainable lifestyles.

Profiles of the award winners

10 Project Farm Karnitz
Learning space

18 Forum for Exchange between Cultures
Network

24 Markt Oberelsbach
Local authority

32 Integrated Comprehensive School Oyten
Learning space

40 The New Emscher-Valley
Network

48 Awards in the UNESCO Global Action Programme on Education for Sustainable Development

54 Mapping award-winning ESD in Germany

55 Photograph and illustration credits

56 Imprint
Dear Reader,

We only have one Planet Earth, and we aim to treat it so future generations have what they need: drinkable water, clean air and fertile soils. The word for this of course is ‘sustainability’. But how can our society achieve what we call sustainable development? What we need are creative ideas, strategies, the courage to shape the future and, needless to say, knowledge and awareness.

To this end, the Federal Ministry of Education and Research makes a major contribution at the national level to enshrining the principle of sustainability in the German education system – in the form of Education for Sustainable Development (ESD). The aim is for everyone to understand the impacts of their own actions on the world. Only then will they be able to make decisions that embody responsibility for the long-term future – in other words, decisions that are sustainable. Germany plays a pioneering role internationally here, not least as a result of its national multi-stakeholder ESD process and by adopting the National Action Plan on Education for Sustainable Development.

But when it comes to making ESD a reality, very much depends on its implementation in the field. For this reason, in collaboration with the German Commission for UNESCO since 2016, we have honoured outstanding initiatives that are exemplary in advancing ESD. These so far include 148 learning spaces, 131 networks and 30 local authorities across the whole of Germany. In this publication, you will encounter five such initiatives in greater detail. You will learn about the challenges faced by stakeholders along the way and how they have succeeded in integrating ESD into their structures.

Taking these examples as a source of inspiration and encouragement, let us work together to establish awareness of sustainability as a self-evident educational responsibility in Germany and worldwide. In cooperation with the German Commission for UNESCO, we will continue to select outstanding ESD activities for award and give them the visibility they deserve in future years.

I wish you an enjoyable read.

Anja Karliczek
Member of the German Bundestag
Federal Minister of Education and Research

Dear Reader,

Fifteen years of dedicated work to promote Education for Sustainable Development have established solid ESD structures. ESD has found its place in our society and is growing in importance. By promoting ESD, we help to ensure that the 17 global Sustainable Development Goals (SDGs) can be achieved by 2030. That calls for great effort from everyone.

We are currently seeing how much the corona pandemic is changing the world. But it is also teaching us the importance of international cooperation. This applies equally when it comes to achieve the SDGs by 2030. We must do everything we can to establish ESD even more firmly in Germany and worldwide.

Already today, there are magnificent examples that show how rethinking in the direction of sustainability can succeed and ESD be brought to life in a holistic manner. In Germany alone, over 300 award-winning local authorities, learning spaces and networks in the UNESCO Global Action Programme (2015-2019) make a major contribution with their commitment, ideas and educational approaches to the United Nations’ Agenda 2030. This publication illustrates how educational landscapes and centres of activity for ESD are emerging in many places around Germany. “Das Neue Emschertal” (The New Emscher-Valley) network, for example, is successfully and sustainably regenerating the region around the Emscher river – formerly an open sewer – while creating a wide range of educational facilities with the involvement of the local population. An exemplary initiative with regard to global partnerships is the “Forum zum Austausch zwischen den Kulturen e.V.” (“Forum for Exchange between Cultures”). This links up vocational school trainees and educators between Hamburg and Mozambique in vocational education and training for ESD projects.

In 2020, UNESCO is launching its new programme, “Education for Sustainable Development: Towards achieving the SDGs” (“ESD for 2030” for short) as part of the Decade of Action for the Agenda 2030 announced by the United Nations. The German Commission for UNESCO, too, will continue to strengthen its commitment to ESD and, together with its local partners, work to ensure that our society follows the path of sustainable development.

As the five award-winning initiatives presented in detail in this publication show, global ideas need local solutions. Emulation is positively encouraged.

Yours

Professor Maria Böhmer
President of the German Commission for UNESCO
Showcasing good practice in Germany: 
The ESD Awards 

Showcasing innovative, good ESD practice is one of the key strategies identified in the UNESCO Global Action Programme on Education for Sustainable Development (2015–2019). As a result, the Federal Ministry of Education and Research and the German Commission for UNESCO initiated the German “ESD Awards”: Between 2016 and 2019 more than 300 initiatives were honoured for their high-quality implementation of Education for Sustainable Development.

Highlighting examples of good practice, the awards sought to increase visibility of ESD, foster innovation and promote structural implementation in German educational systems. Once a year, a call for application was issued to the German ESD community. Depending on the nature of their initiative, interested parties could apply for the ESD Awards in one of three different categories:

Formal and non-formal learning spaces
Day-care centres, schools, universities, associations, companies, businesses, adult and continuing education institutions and other private or public organisations in Germany that adopted the principles of sustainability according to the Whole Institution Approach.

Networks
Networks, learning regions or educational landscapes that successfully joined forces to promote Education for Sustainable Development in an at least partially formalised cooperation. A network typically comprised at least five independent partners.

Local authorities
Local authorities, independent cities and districts that promote the expansion of Education for Sustainable Development in all relevant municipal institutions and possibly even beyond in a structural and holistic approach.

How learning spaces, networks and local authorities mainstream sustainability and foster creativity for ESD show the following five award-winning and outstanding initiatives in this publication.

Based on the criteria of Education for Sustainable Development (p. 3), applicants of each category were expected to:

– have ESD as their guiding principle, mainstreaming sustainability into all aspects of the learning environment
– address all three dimensions of sustainability (economical, ecological and social)
– apply a participative educational approach which generates competencies for ESD
– relate their work to the goals of the Global Action Programme and the Agenda 2030
– prominently present their ESD work on their website

A jury consisting of members of the National Platform – the supreme steering body for ESD in Germany –, the Federal Ministry of Education and Research, the Free University of Berlin and the German Commission for UNESCO discussed and decided on the awards to be granted. Depending on the level of commitment to ESD and to create an incentive for further development, organisations were awarded on three different levels:

Level 1: A holistic approach is evident and activities have been successfully launched
Level 2: Activities are intensified
Level 3: Activities are evaluated and further developed. The learning space, the network or the community serves as a role model and radiates to the outside world

Why participate?
Successful ESD initiatives received the UNESCO Global Action Programme logo for their work, were featured on the German ESD Portal and benefited from exchanges with other high-quality education initiatives – for example at several networking meetings between 2016 and 2019. In addition, the Free University of Berlin offered advice on further development for the institutions.
Creating scope for action

Being open and linking up

Combining tradition and sustainability

International networking

Common vision

Cultural exchange

Being inclusive

Working as equals

Experimentation

Participation

Authentically teach skills

Tying in with people's own experience

Creative freedom

Working together for the next stage

Questioning the status quo

Self-reflection

Working together for change

How it works...

Education for Sustainable Development
In August 2019, there is no camp fire on the Project Farm Karnitz (Projekthof Karnitz) – or at least not like those in the past. Instead, a friend of the farm has collected red and orange plastic bags, placed them over the firewood and hidden some fairy lights underneath. The result is deceptively lifelike, but the smoke and crackle are missing. In Karnitz, camp fires are strictly forbidden this summer because there has been no rain for weeks. Staff working on the farm say the climate crisis has arrived in this remote region of Mecklenburg-Western Pomerania. But this is just one of the topics the farm operators are dealing with right now.

→ Pages 10–17

Profile

Karnitz
Mecklenburg-Western Pomerania

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Project Farm Karnitz

Pioneering work on the farm

Project Farm Karnitz, then a run-down farm complex, was bought at the end of the 1990s by a couple from Berlin. With the help of friends and a group of students from Technical University of Berlin, new owners Joachim Borner and Martina Zienert restored the property in the most environmentally-compatible way they could, thus performing some pioneering groundwork in Germany at the time. Even today, the farm remains an experiment in achieving a sustainable, future-focused way of life. This includes water and energy supply, a plant-based sewage treatment plant and a huge vegetable garden.

For the people of Karnitz, living sustainably means not just respecting the environment, but respecting and including others. “In our workshops with teenagers, the student is sometimes the lecturer and I, the lecturer, do the cooking,” says Anne Mette, a member of the farm’s board. “They speak the same language, after all.” And on the farm, decisions are made jointly and everyone gets a vote.
Even today, the farm remains an experiment in achieving a sustainable, future-focused way of life.
Getting involved and having a say

The farm is designed to serve as a public platform for dialogue in the region. It offers open spaces for mutual exchange, to share new input and ideas, conduct experiments, get involved and take action. Through artistic and other types of activities and events, new paths of access to sustainability-related themes are developed and the status quo is questioned. The farm wants to be not just an idea-giver for sustainable lifestyles, but to be involved as a local stakeholder and spark new ways of thinking and acting. “We’re a place that wants to have a voice, intervene and mediate. And to do that we use every opportunity we get and every available channel of communication,” says Joachim Borner. It’s not always easy because the farm’s initiators were initially perceived as strangers. “We don’t want to be some kind of isolated experiment. If we want to spark and drive transformation, we have to be involved in what’s going on around us,” Borner adds. Since the farm was restored back in the 1990s, it has gradually become a popular touch point for neighbours, local authorities and others from further afield looking for advice on sustainable, future-focused lifestyles.

This includes intensive cooperation with the high school Fritz-Greve-Gymnasium in Malchin. Since 2005, the school’s students in grades nine to twelve have been visiting the farm during regular school hours and also during dedicated project weeks. Working with the team of the farm, they initiate and implement sustainability projects – such as planning the use of photovoltaics on the school roof as part of an “Anthropocene Era activity” (www.schulevonmorgen.org).

A wide range of events, school holiday activities and workshops are regularly held on the farm and there are new formats being planned all the time. With its Bürgersalons (citizens’ salons), Project Farm Karnitz issues regular invitations to enter into dialogue on topical issues of the day. A workshop series on resilience looks at how the region can become more robust in tackling the challenges faced. Topics such as sustainable farming, regional food supply in response to global warming, dealing with demographic change and securing services of general interest are all openly discussed.

And although made some 15 years ago, the jointly-produced COOL music videos are as topical as ever – if you really think about it, they were a kind of small-scale, Mecklenburg-based Fridays for Future movement that was way before its time (https://www.youtube.com/user/KMGNE – Playlist COOL).

“We’re a place that wants to have a voice, intervene and mediate. [...] If we want to spark and drive transformation, we have to be involved in what’s going on around us.”
—Joachim Borner, Project Farm Karnitz
Nurturing a new narrative

The aim of the large range of events held on the farm is to question the established sustainability and climate change narrative, and develop new, tangible, future-focused stories. The same applies for international models, too: “People in the region are interested in topics like old-age provision, mobility, healthcare and urban migration,” says Anne Mette. “When we talk of the 17 Sustainable Development Goals, we have to link them directly with people’s everyday lives. If we don’t, they won’t be taken on board,” she adds.

Finding a new narrative for sustainable development is also a topic at this year’s Summer Uni – an annual event on the farm. People have travelled from all over Germany to attend, taking a break from their jobs or studies to think and reflect in a remote and peaceful setting, working creatively while there. And with themed workshops ranging from making a film to drawing comics, they have ample opportunity. “Climate change is far too abstract, it’s really hard to envision,” a participant explains. “Drawings and comics can make it easier to understand. Illustration helps people look at alternative ways of living together. They find it difficult to accept change and pictures can help bring them onboard.” In the big barn, a mix of pictures and sound is used as a backdrop in the search for answers to how we will live in 2050. “Using creative approaches, we can move away from established models and try new ways of thinking. It gives us more freedom because we’re not confronted with models that are gridlocked,” says artist and workshop leader Christian Kabuß, who lives in the next village called Altkalen. For him, the farm is a welcome platform on which to share ideas and insights – one that offers creative, future-focused ways of working in the region.

Leaving familiar horizons behind

The Project Farm Karnitz is well connected both regionally and internationally. Connections usually occur via employees’ personal contacts and are seen as hugely enriching. “Being able to look beyond familiar horizons is a great privilege. Getting to know people in person and sharing hugs sparks emotion and fosters empathy,” says Anne Mette. “Without personal encounter, the energy needed to ignite a global quest for change just isn’t there. That makes it harder to picture the global outcomes.” Through various projects, the farm operators work to invite groups from Eastern Europe and the Global South to help develop and design visions for the future and work together as one. And in every project activity, refugees living in the region also become involved.

Recipe for success

Creating an institution like Project Farm Karnitz

“It takes people who are committed to their particular project and never tire in writing endless project proposals and applications,” Anne Mette explains. “You need infrastructure, a space that can be opened to the public – and a vision.” As that vision develops and grows, many additional projects are planned and implemented – among them studies on life in the region, greater provision of sustainable supplies on the farm, a network of “activated” stakeholders in the region known as Mecklenburg Switzerland, and a new website covering the climate crisis (einskommafu-enfgrad.org). In 2019, Project Farm Karnitz’s exemplary ESD work was recognised for the second time by the Federal Ministry for Education and Research and the German Commission for UNESCO.
The aim is to use technical and vocational education and training (TVET) to create a global network and, as equal partners, work together as one," says network founder Rainer Maehl from the Hamburg Institute for Vocational Education and Training (HIBB). Maehl is also a teacher at the Gsechs Vocational School for Wood, Paint and Textiles. "The exchange programme, which we initiated at Gsechs, has been in place for quite some time. We continued the work in the form of a registered association so we could connect and cooperate with other schools and place the exchange on a footing that can be used by all," says Rainer Maehl, describing how the network came about. Today, five Hamburg-based vocational schools are active members of the Forum for Exchange between Cultures. Together, they work with two partner schools in Mozambique to develop projects involving things like a caries prevention centre and playground construction. Through the work performed by the network, the vocational schools promote cultural exchange as a key aspect of Education for Sustainable Development, linking it to yet other sustainability topics and themes.
In selected learning spaces, aspects of sustainable development are addressed by each team and in each training programme.
ESD in school curricula

As part of the network, the schools work to integrate Education for Sustainable Development (ESD) as a firm component of everyday classroom life. “The aim is to introduce and implement the topic as curricula are developed,” says head teacher Volker Striecker. “It poses a huge challenge because it means evaluating the curriculum as a whole and assessing where ESD can best be introduced. I think we’ve done a really good job. In selected learning spaces, aspects of sustainable development are addressed by each team and in each training programme.”

In teaching crafts and trades, the school focuses on wise use of resources. With the help of self-developed teaching materials, the teachers demonstrate how working conditions sustainably in, for example, the painting and varnishing trade – starting with protective covering right through to critical assessment of working conditions in the countries of origin and energy-intensive production of materials and tools. “It’s really important that our students take sustainability out into the companies they work for. The idea is to change not just personal attitudes and behaviour, but also alter business practices and methods. Every little helps – we sow the seed that grows into a sapling and matures into a tree,” says Striecker, explaining the ripple effect the project has on everyday operations.

An eye for global connections

Stefan Kurbjuhn, head of the Vocational School for Healthcare Professions (Berufliche Schule für medizinische Fachberufe), sees a great advantage in fostering exchange between students: “The visits in Mozambique create huge added value for our students. They come back to Germany and say: ‘I now have a completely different picture. Not just of Mozambique, but of the world and of life.’” The work performed as part of the project links sustainability topics with getting to know new cultures, different living conditions and alternative approaches to learning. Apart from addressing many of the Global Sustainable Development Goals, the students also see that although the goals are applicable across the board, attitudes and approaches to them differ from place to place. Apprentices learn to look at things from a different angle and rethink their own attitudes and behaviour.

This is the goal that Stefan Kurbjuhn connects with engagement within the network: “We not only have to train suitable workers for the labour market. We also want to send young people out into the world who are aware of their actions and are able to engage with others prejudice-free.” The partners in Mozambique agree: “We value the close contact with the team from Germany. Sharing views and ideas on sustainable development is truly enriching and helps our students to reflect on their own attitudes and behaviour.”

Companies benefit from dialogue and exchange

“Networking relies on personal encounter,” says Maehl, drawing on the experience of recent years in which he promoted the Forum outside the school arena on numerous occasions. And it has borne fruit. The Carpenters’ Guild has supported a project by providing tools and small machinery. Maehl reports that large companies in particular are aware of the skills and expertise that apprentices acquire in international exchange programmes, and often encourage their own apprentices to take part in the learning partnership. The situation is somewhat different in small businesses as they are reliant on the work performed by their apprentices. So, in some respects they take a more critical view of the programme. But this is where the network can help change the way business owners think. Looking back on her time as an apprentice, Ronja says: “I was able to have lunch with colleagues, tell them about the project in Mozambique and show them photos. That gave some of them food for thought, leading them to change their opinions and views.”

For Ronja, the student exchange with Mozambique was the start of a new phase of life. After completing her apprenticeship, she went back to Mozambique to do a voluntary social year, working in a carpenter’s shop in Maputo.

In 2018, the Federal Ministry for Education and Research and the German Commission for UNESCO recognised the network as a whole and assessing where ESD can best be introduced. I think we’ve done a really good job. In selected learning spaces, aspects of sustainable development are addressed by each team and in each training programme.”

One project run by the network focuses on caries prevention in a huge shipping container usually used to transport ocean freight. The converted container was shipped from Hamburg to Mozambique as a ready-to-assemble caries prevention centre and used as a learning space to teach children about caries prevention. Prior to shipping, apprentice painters, varnishers, fitters and other trainees from participating vocational schools designed and produced the interior fixtures and fittings. When installing these in Inhambane and Mozambican and German apprentices finished the conversion, adapting it to local needs. “They were able to do a lot more than we could and knew how to get the job done if the tools they needed were missing,” says Lisa Lohoff, recalling the collaborative effort. The caries prevention programme for children was jointly developed by trainee dental assistants from the schools in Mozambique and Germany during mutual visits in Inhambane and Hamburg. Close collaboration between the different trade unions is one of the biggest advantages of the network, says Volker Striecker, head of the Gsechs Vocational School for Wood, Paint and Textiles: “Thanks to the close cooperation with the unions, our contacts with other Hamburg-based vocational schools that are interested in this topic have grown.” And at the instruction of the Mozambique Health Ministry, the caries prevention model will now be integrated into training for healthcare workers nation-wide.
A small community with innovative capacity

This community situated inside the UNESCO Biosphere Reserve Rhön and scarcely accessible by public transport has proved more innovative and sustainable than many larger communities and towns. “We are a small rural authority with all the challenges of rural life. At the same time, we are living proof that vision, innovation and modernity can be at home in a small place,” says Birgit Erb, the Mayor of Markt Oberelsbach. Erb goes on to relate the latest sustainability innovations in the community, such as energy-efficient refurbishment of the town hall, installation of a fast charge point for electric vehicles, and conversion of the street lights to energy-efficient LED lighting. Municipal buildings are also being successively converted to energy-efficient LED lighting.

Among the gentle hills of the UNESCO Biosphere Reserve in all of Bavaria, opening in 1986, lies Markt Oberelsbach. The first milestone of which was the opening in 1986 of the first nature conservation information centre in all of Bavaria. Located on the outskirts of the town, this is a small building with well-made windows and a modern and accessible facade.

In operation since 2012, the Umweltbildungsstätte Oberelsbach – the community’s environmental education and sustainability centre – is an example of how the community has continued the decades-long tradition of sustainability and environmental education in the area. The centre offers a range of modern building courses and other activities, aiming to raise awareness of the importance of sustainable practices.

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Combining tradition and sustainability
Vision, innovation and modernity

Challenges of rural life

Markt Oberelsbach
Bavaria

Profile
Sustainability projects are combined here with education from the outset.
Innovating means being ready to provoke

“We can provide the enabling framework for sustainability processes to be set in motion here in Markt Oberelsbach. But the council can only give the impetus and innovations have to be implemented together with the population,” Erb explains. Erb puts great conviction and enthusiasm behind the community’s transformation and sometimes has some persuading to do.

Local innovations and investment projects occasionally attract sceptics. “When you launch a project, it can be seen as a provocation. Sometimes you have to go for more than is really possible, but a process then gets underway and people discuss the pros and cons. There’s usually a good outcome in the end.” Communicating well with the public and building awareness are important here “to show people that sustainability is a location factor for the future,” Erb says. She also highlights the importance of involving the public in decision making. This was plain to see in the building of the environmental education centre in Markt Oberelsbach. In an architectural competition, residents were presented with a selection of proposals for the building and the decision was made in favour of a visionary architecture consisting of a circular building raised on stilts.

Connecting innovation and education

Kathrin Scholz, the ESD officer in the town hall, promotes projects in the area of Education for Sustainable Development. Her aim is to develop and maintain an education landscape implemented by the local authority. Sustainability projects are combined here with education from the outset. After the street lighting was converted to LEDs to protect nocturnal animals, for example, the environmental education centre added guided tours of the night sky to its education programme. The shielded street lighting makes it easier to see the stars. The first-hand view of the night sky is supplemented with an app for a digitally enhanced experience. “We are often the driving force and the pacesetter for initiatives in Education for Sustainable Development,” Erb explains.
Gardening in kindergarten

Visitor groups can experience sustainability. This makes for strong sustainability commitment among much of the region’s populace for regular additions to the education programme. People also benefit from the additional income and the publicity for local enterprises as regards tourism.

Education for Sustainable Development from an early age

In Markt Oberelsbach, Education for Sustainable Development begins in childhood. The community has two preschools that are both certified as biosphere facilities. “Both preschools serve as examples. They show in a variety of ways and in concrete form how to create structures for more sustainable everyday living”, says Mayor Erb. The children in the Markt Oberelsbach municipal nursery have just completed a project in which they learned what paper is made of and how much goes into producing it. As a result, they now better understand why the preschool never buys new paper and why leftover paper from the community is used for making things. Projects are often the outcome of spontaneous questions that children come up with during excursions in nearby woodlands. “The ideas for projects mostly come from the children rather than from us,” says one of the staff.

“The guiding principle of sustainability pervades the entire educational landscape here, from nursery, after-school care and primary school to the nature conservation information centre and the environmental education centre. This is one of the reasons why the new generation is really getting involved,” says Kathrin Scholz. Indeed, there are a number of young people who live in the community and make an innovative contribution to shaping the educational landscape. In one of the education modules provided through the environmental education centre, for example, two young brothers offer hikes with alpacas, on which they tell participants about looking after the animals and what is special about UNESCO Biosphere Reserve Rhön, and promote regionality. The business model has proven its worth and the idea has now grown into a successful family project.

The German Commission for UNESCO and the Federal Ministry of Education and Research awarded the environmental education centre in 2017 and Markt Oberelsbach as a whole in 2018 for their great commitment to Education for Sustainable Development.

Growth of an educational landscape

Part of the rhöniversum network, the Umweltbildungsstätte (environmental education centre) is a platform and driver for learning about the UNESCO Biosphere Reserve Rhön. The centre places the focus on the model region for sustainable development and emphasises how the environmental, social and economic dimensions as well as tradition can all be combined. Education modules are provided by regional stakeholders, including carpenters and farmers to shepherds and breweries. Mayor Birgit Erb also takes part in discussions as part of a module on demographic change every time it comes to how local authorities can embrace sustainability. This makes for authentic sharing of skills and knowledge.

“Visitor groups can experience sustainable management and coexistence in a small community, and gain an impressive view of how we bring environmental, economic and social dimensions into harmony,” says Bernd Fischer, head of the environmental education centre.

Among the regional personalities who receive groups of visitors for the centre’s education activities is Josef Kolb. An organic farmer and shepherd who keeps the famous Rhön sheep breed, Kolb is a pioneer in sustainable economic activities. In 1985, together with BUND Bayern e.V. (Friends of the Earth Bavaria), he began breeding the endangered Rhön sheep. These are traditionally seen as being particularly well suited for maintaining the wide open countryside of the biosphere reserve and preserving the high biodiversity of its pastures. The animal with the distinctive black head is today the emblem of the Rhön region and is once again widespread. In 2019, it was removed from the red list of endangered domestic animal species. The close links between tradition and sustainability are especially plain to see in the shepherd’s work. Josef Kolb passes on his knowledge in education modules provided in cooperation with the environmental education centre. “Our visitors experience with all senses what farming and our work mean to us.” In addition to the educational programme, visitors can purchase a wide range of Rhön sheep products in the Kolb family shop.

Markt Oberelsbach shows how established local stakeholders and enterprises can join forces to build a functioning and living educational landscape. A strong sustainability commitment among much of the region’s populace makes for regular additions to the education programme. People also benefit from the additional income and the publicity for local enterprises as regards tourism.

Education farm

In 2017, Claudia Hartmann completed the Bavarian agriculture ministry-certified training as an education farm manager. After gaining her certification, she approached the Oberelsbach environmental education centre with the idea of providing education modules for groups on her farm, where she has around 100 head of cattle. Since 2017, groups have been coming to her twice a month to learn about work on the organic farm. The Hartmann family has run the farm on an organic basis for some ten years. According to Claudia Hartmann’s son, this is more profitable than conventional farming. “On the farm, people can learn everyday skills and responsibility and develop an emotional bond with the environment. For some children and adults, their visit to the farm is the first time they think about how meat gets on their plate,” she says. She enjoys the work and at the same time it is a financial contribution for the farm.
Since it was opened in 2012, the Integrated Comprehensive School in Oyten (Integrierte Gesamtschule (IGS) Oyten), Lower Saxony, has pursued an approach that sets it apart from other schools. It sees Education for Sustainable Development as an underlying principle in matters of education and as an holistic approach to everyday life in school. “Education for Sustainable Development is so much more than teaching,” says teacher Kitti Müller. For her, it includes the way the school janitor and secretaries work, and even the solar panels up on the school roof. What makes the school unique is that it was opened in 2012 and designed by a planning group who, with support from the Oyten local authorities, focused on an alternative school model from the outset.

→ Pages 32–39

Living the Whole Institution Approach

With the school’s Whole Institution Approach, meaning its holistic approach to Education for Sustainable Development, stakeholders are involved in decision-making processes. Students are given both the interpersonal relations and the recognition they need to develop as individuals and discover their strengths. The aim is to enable young people to act as responsible, sustainability-focused members of society. Although the school differs from others in Lower Saxony, the curriculum in Oyten is still governed by the Lower Saxony education plans.
Connected thinking cannot be learned in a series of separate subjects.
Connected thinking and acting

Five times a week, the IGS Oyten offers theme-based lessons for students of all grades. Teacher Martin Ufer believes this is hugely beneficial: “Connected thinking cannot be learned in a series of separate subjects.” In theme-based lessons, sixth graders at IGS Oyten will be studying the Wadden Sea mudflats for the next few weeks. First, the teacher provides input in a plenary session and then collects themes together with the class. The students then choose aspects of those themes to study in an interest-led way. Sixth-grader Hannes is learning about environmental pollution in the sensitive mudflat ecosystem: “Most people who visit the Wadden Sea take along food and drink packaged in plastic. When they’ve finished, they just throw the packaging into the Wadden Sea where it’s eaten by birds that mistake it for food.”

In three separate phases, the students research, sort and select information. They then use it to develop their own projects, in which content and working methods from different subjects are linked. But communicating subject knowledge is only the first step. For teacher Kittí Müller, the main focus is placed on students acquiring the ability to act: “What can I do to protect the Wadden Sea? How can I get involved and what topic can I focus on?” The students work at different levels, says Kittí Müller – those with and without disabilities can complement one another by means of their cognitive abilities and creative skills.

The students present their completed projects to teachers, parents and classmates. The time and effort that goes into working on the projects and presenting the final results flow into learning development reports which replace marks or grades up to grade nine. “They have a better understanding of how the world works. Their behaviour changes and in most cases they are not afraid to get involved or give a presentation,” says teacher Kittí Müller, full of praise. They have learned that the idea of developing ideas independently and engaging in interest-led work can foster their intrinsic motivation and increase their ability to act.

The subjects of maths, German and English are taught in what IGS Oyten calls learning offices. There, students can decide – to a certain extent – what subject they want to tackle and are given tasks that are tailored to their performance levels. Sixth-grade student Luisa describes the benefits of the large degree of freedom she has in choosing her lessons herself: “I can work at my own pace and decide far more freely which tasks I want to work on.”

Learning to take action: You can change the world

Working under the slogan ‘You can change the world’, the tenth graders are emboldened to complete self-developed projects in class. “Students at IGS Oyten live up to that slogan in a wide variety of impressive ways,” says a teacher. With activities ranging from species conservation to civil courage, the tenth graders demonstrate their ability to act before fellow students, teachers and parents, and most of all to themselves, gaining a sense of self-efficacy as they go. The impact of the holistic, innovative approach adopted at IGS Oyten can be seen in the vast amount of support shown for Fridays for Future. Referring to her eleventh and twelfth graders, the teacher explains: “If our teaching on sustainable development and the Global Goals has the effect we want, then students shouldn’t be in school on Fridays.” Even the younger ones, like 11-year-old Hannes, are great fans of the movement: “At 15, Greta Thunberg is a big star. But she’s a different kind of star, she doesn’t get any money for the things she does.”

Sharing expertise

At IGS Oyten, the holistic approach to Education for Sustainable Development also includes the way teachers work. Teachers work together productively, which in turn frees up time, says teacher Ingrid Berger: “Planning of theme-based lessons is also done as a team so that teachers from different disciplines are involved and they can develop materials together.” By working as a team, the pre-prepared teaching materials can be shared and used by all – that frees up teachers to work on projects, both in and out of school.

Also, regular general assemblies of IGS Oyten staff and students are held. Together, they develop and further enhance the school model, and thrash out new ideas. Further training for educational staff is held at least three times a year. This includes the school’s two social workers who in addition to their everyday work on prevention of and intervention in conflict and crises, also organise student working groups and projects on topics such as equality and racism.
Open to local experts

To develop further in a targeted way and enhance the curriculum through non-school experience, IGS Oyten collaborates with local stakeholders. Teacher Kitti Müller mentions the “Wühlmause” (voles) by way of example, describing them as a “gang of best-agers” who look after a biotope in Oyten. Sustainable development is lived out authentically in a way that stimulates all the senses, breathing life into the theory contained in students’ text books. Kitti Müller would like to see even more intensive networking and cooperation with stakeholders in the region, which unfortunately is often hampered by their poor visibility.

Opening up to the outside world and involving non-school partners also takes place at local authority level. The local authorities in Oyten attach great importance to eighth-graders being introduced to the topic of political participation and engagement. “The mayor takes time to talk to each class about his everyday work and to explain how local politics works,” says a teacher. And for years, the eighth grade has been visiting the town hall to attend panel discussions featuring local politicians. “As the students ask very critical questions, the politicians have been doing their homework very thoroughly ever since the first meeting was held,” says Kitti Müller, pleased at the effect. IGS Oyten wants to intensify and cement its collaboration with local authorities in the coming years.

In 2019, the German Commission for UNESCO and the Federal Ministry for Education and Research recognised the school for the second time for its untiring, holistic approach in implementing Education for Sustainable Development. For a school that has adopted a pioneering attitude and has faced much criticism along the way, the recognition is of huge importance says a teacher. It shows parents that the staff are professionals and that their children are in reliable hands.

Once a year, ninth-grade pupils step up to face a self-chosen, personal challenge. In groups large and small, they plan their own adventures – focusing perhaps on the Sustainable Development Goals (SDGs). After a group of students had taken an in-depth look at the 17 SDGs, they planned a bike tour to local locations – the aim being to seek out places where sustainable development is already a reality. A wind farm and the information board in the nearby Sandtrockenrasen Achim (dry grassland nature reserve) are among their stops. On video, they captured what sustainability means in the places they visited along the way.
The New Emscher-Valley

Creating scope for action

Profile

Emschertal
North Rhine-Westphalia
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Kai Kolodziej
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The Emscher river that flows through the Ruhr region is some 85 kilometres long. The waterbody that has long carried wastewater is gradually being restored to its near-natural state. But the restoration is not just a matter of restoring nature. The change allows for a wide range of opportunities to regenerate the region and develop environmental knowledge in several sectors. Over time, this has led to the creation of more and more networks whose work focuses on specific themes, such as sustainability, water management and regional development. Local citizens, local administrations, associations and clubs, schools, institutes of higher education, industry associations and private companies all join forces to design and shape a vibrant region in which people can and want to live. “One of the biggest advantages is that we’re not going this alone. We have the support of numerous partners,” says Kai Kolodziej from Emschergenossenschaft, the local public water management utility.

→ Pages 40–47

Sustainable regional enhancement

Kolodziej coordinates the network “Das Neue Emscher-tal” (The New Emscher-Valley), whose aim is to improve the Emscher region in a sustainable way. Emschergenossenschaft sees itself as both supporter and driver of this large-scale, 40-stakeholder-strong network. “Our vision is to create a new Emscher region,” says Kai Kolodziej. “As the region’s water management stakeholder, we, Emschergenossenschaft, see our role as an enabler – facilitating networking, mediating between the network partners and acting as a point of contact for all.”
River-related structural change

Water shapes not just the region, but also local life. The development potential of the Emscher region is a focal point of the network’s work. One example involves the annual Emscher-UNESCO student conference attended by some 80 students. They take a deep dive into the theory and practice of the intergenerational Emscher Conversion Project, taking an interdisciplinary approach in addressing specific future issues such as climate adaptation activities in urban areas. With excursions to selected waterbodies, they work alongside experts to develop their own ideas and solutions which they then develop further and enhance in the classroom back at school.

“Some of the students from more rural areas are sometimes shocked to learn that for people living in urban areas, access to nature can mean just a small patch of grass with a stretch of water. They come to appreciate the value of nature far more,” says Ulrike Raaßch from Emschergenossenschaft.

Three Emscher yards, three platforms for education

The Emscher-Yards (Emscher Höfe) are one of the main touch points in the network’s activities. In recent years, Emschergenossenschaft has purchased three old yards located right on the banks of the Emscher river. Serving as a platform for a wide range of stakeholders, the yards – Emscherquellehof in Holzwickede, Emschertalhof in Castrop-Rauxel and Emschermündungshof in Dinslaken – provide spaces for activity and action.

“The yards make it possible to reach people in a low-threshold approach,” says Kolodziej. “The yards along the Emscher river were the missing link that brought the network to life,” he adds. The Emscher-Yards serve as a venue for educational events, art and cultural happenings, leisure, recreation and meeting places. All activities on the three yards share a common goal – to serve as spaces where environmental, social and economic sustainability are practiced, communicated and taught.

Inclusion is an integral part of life at Hof Emschertal

Spotlight on Hof Emschertal: Located to the north-east of Castrop-Rauxel on the largest floodplain and water retention basin along the Emscher river, the yard has been a touch point for cyclists and people out enjoying a walk. A café offers a welcome place to stop during weekend outings. But what many visitors are unaware of is that they are served by inmates from neighbouring Castrop-Rauxel prison. The prison is located right next door to Hof Emschertal, where the prisoners perform various types of work.

In cooperation with the local beekeepers’ society, they maintain the beehives that are kept on the yard. Things that they make, such as bee hotels, are advertised and sold on a joint website used by all North Rhine-Westphalian prisons. This gives the inmates a sense of self-efficacy and purpose. The prisoners also tend the yard complex and have created a vast vegetable garden which is used at weekends by the child and youth organisation “Emscher-Falken” as part of an educational programme for children and adolescents. When the weather is bad, the Emscher-Falken team are able to take their activities indoors, using a dedicated room where kids can tinker around and build things.

The different stakeholders complement and support one another. “Listening to network partners’ views and perspectives opens your mind to other ways of thinking,” says Julius Wandelt, Governor of Castrop-Rauxel prison. “I love the way things work here. Lots of people with good hearts and healthy mindssets collaborating with one another and taking pleasure in the fact that it all works so well,” he adds in describing the network’s approach. “It’s inclusion at its best.”

Wandelt is pleased to be able to offer some inmates good and meaningful work. “Effective resocialisation means giving offenders the opportunity to try life without re-offending and helping them integrate back into society. Here on the yard, they are in contact with nature and other people, they have to care for and see to things around the farm, and – most importantly – they have to accept responsibility.” And he continues: “For the inmates, the yard’s recognition as an ESD network in which they are personally involved means a lot. It shows they are part of a global community and are participating in a global project to promote responsible lifestyles, a solidarity-based society and improve people’s quality of life.”

Some of the students from more rural areas are sometimes shocked to learn that for people living in urban areas, access to nature can mean just a small patch of grass and a stretch of water.
Environmental education at Hof Emschermündung

If you follow the Emscher cycle path further down river, you reach the yard “Hof Emschermündung”. Located in Dinslaken, the yard was refurbished and expanded by Emschergenossenschaft in 2013. The atelier used by Peter Reichenbach, initiator of the global “sevengardens” network, is located on the top floor of the building. Here, both children and adults can use natural materials to make dyes and paints, experiencing environmental processes that incite their different senses. Everything they need grows in purposely-designed dye gardens on the yard. Artist Peter Reichenbach is delighted at how the network “The New Emscher-Valley” has developed. “Emschergenossenschaft is the network’s driver and supporter. Plus, the network provides a framework for the work that we do.” In 2015, the UN University (UNU) recognised the Ruhr region as a Regional Centre of Expertise on Education for Sustainable Development (RCE-Ruhr). As a global model within the UNU structure, the yards operated by Emschergenossenschaft have taken on a new role as a campus for non-formal learning. A stream of international guests have since visited the RCE-Ruhr to learn about the new participative approach. Right from the start, a growing number of partner organisations helped to set up and design the yard “Hof Emschermündung” – among them the Wesel chapter of the Nature and Biodiversity Conservation Union (NABU), which works with groups of children to explore environmental relationships through play. In the spirit of Education for Sustainable Development, the yard is becoming a place of non-formal learning, experience and encounter.

The town of Dinslaken, which is also a recognised ESD local authority, is also part of the network. Thomas Pieperhoff, advisor for the Mayor of Dinslaken, says the network’s greatest asset is its size: “If there’s a problem or if someone has a question, all it takes is a quick brainstorming session. That’s what networking is all about. The partners always come up with practical solutions and have lots of good ideas.” Local authority cooperation with the various stakeholders also ensures that Education for Sustainable Development finds its way into the political arena.

The Emscher-Yards – places of education and encounter

In the dye gardens on the yard “Hof Emschermündung”, inks, textile dyes, cosmetics, wall paints, colourful herbal teas and rainbow-coloured foods are made. Using this approach, artist Peter Reichenbach, initiator of the global “sevengardens” network, wants to pass on ancient knowledge on sustainable, plant-based production of dyes and paints. The work performed by “sevengardens” was recognised by the German Commission for UNESCO and the Federal Ministry for Education and Research in 2019.
Spotlight on the Sustainable Development Goals

The work performed by the network is constantly evolving with an eye to the 17 Sustainable Development Goals. “In the future, stakeholder dialogue and exchange will be further intensified. In addition, existing and new measures will be coordinated and aligned so we can use the synergies between them,” says Kerstin Stuhr from Emschergenossenschaft, who coordinates the educational programme run by the regional water industry associations, Wasserwirtschaftsverbände Emschergenossenschaft und Lippeverband.

Looking at the network “The New Emscher-Valley”, it is evident how with the tremendous support received from Emschergenossenschaft and especially the provision of spaces in which to act, an ESD network is emerging which although in its infancy functions perfectly well as it grows. With jointly implemented projects and using the open spaces on the Emscher-Yards as places in which to shape and design, stakeholders benefit from a give and take attitude in providing mutual inspiration and support. By working together as one, they become more visible and can reach large numbers of people through their joint activities and events.

Emschergenossenschaft

Modern, sustainable management methods

Emschergenossenschaft, a public water management company, uses modern management methods to provide efficient, sustainable services for the common good. It follows the cooperative principle in everything it does. Founded in 1899, it was the first organisation of its kind in Germany and has since worked, for example, to maintain and manage the Emscher river basin, while providing services such as wastewater management and treatment and flood protection. Since 1982, in close cooperation with the local authorities in the Emscher region, Emschergenossenschaft has been planning and implementing the intergenerational Emscher Conversion Project which involves an estimated €5.38 billion in investment over a period of 30 years. Lippeverband, which was founded in 1926, manages the Lippe river catchment area in the northern Ruhr area and, among other things, is currently restoring the Seseke river – a Lippe tributary – to its near-natural state. With a combined workforce of 1,700 employees, Emschergenossenschaft and Lippeverband are Germany’s biggest wastewater management utility and operator of wastewater treatment plants (some 740 kilometres of waterways, some 1,320 kilometres of sewage canals, around 390 pump stations and close to 60 wastewater treatment plants).
Thanks to numerous dedicated initiatives, Education for Sustainable Development is increasingly becoming established in Germany. Hundreds of award-winning initiatives over the last five years have shown how Education for Sustainable Development can succeed in diverse ways.

The award-winners serve as models for other initiatives, inspire, and ensure that Education for Sustainable Development becomes ever more widely established. In addition, they make a real contribution in implementing the United Nations Agenda 2030 and the UNESCO Global Action Programme on Education for Sustainable Development.

Total of 309 awards presented in the categories learning spaces, local authorities and networks

148 learning spaces
30 local authorities
131 networks

Awards by Länder (states) 2016–2019

Awards by education sectors 2016–2019

- Non-formal and informal learning: 144 (47%)
- Higher education: 37 (12%)
- Technical and vocational education and training: 22 (7%)
- School: 40 (13%)
- Early childhood education: 10 (3%)
- Enterprises: 26 (8%)
- Local authorities: 30 (10%)
Network meetings: “outside the bubble”

Working together to advance the cause of Education for Sustainable Development was the aim of the ESD network meetings organised by the German Commission for UNESCO and the Federal Ministry of Education and Research across Germany from 2017. Interested stakeholders were invited to share ideas and experience. A diverse programme provided opportunities to discuss, gather examples from practice and gave attendees a chance to link up.

“There are so many examples that deserve to be emulated. Meetings like these are invaluable.”
—Catherine Mentz, Head of the Education for Sustainable Development Centre, Saarland State Institute for Education and Media, Network Meeting 2018

“Networking is important as a way of sharing knowledge and experience, mutually motivating each other and creating synergies.”
—Kristina Wetzel, Head of the Agenda Office in the City of Heidelberg Office for Environmental Protection, Trade Inspection and Energy, Network Meeting 2018
After five successful years of the UNESCO Global Action Programme on Education for Sustainable Development, in 2020 UNESCO is launching its new programme “Education for Sustainable Development: Towards achieving the SDGs” – in short “ESD for 2030”. UNESCO will thus continue to promote the embedding of ESD in global educational landscapes and emphasise the importance of ESD for achieving Agenda 2030 as a whole.

As an important driver for Agenda 2030, the follow-up programme ties in closely with the Agenda and its 17 Sustainable Development Goals (SDGs). Like the Agenda, “ESD for 2030” will run until 2030. It will show what contribution ESD can make to the realisation of each of the Sustainable Development Goals while taking into account the at times conflicting objectives of the individual SDGs.

“ESD for 2030” will be launched at the UNESCO World Conference on Education for Sustainable Development and a National Launch Conference in Berlin in May 2021. For us in Germany, this means: It goes on! Because we know: Without local actors, nothing can be achieved globally. It is up to the many local initiatives and institutions to fill the new programme with life.

How it goes on

“The aim is to make ESD even more widely established, further increase its visibility and, through ESD, bring in many more stakeholders and ultimately the entire population.”
—Christian Luft,
State Secretary, Federal Ministry of Education and Research, opening speech at autumn meeting

“ESD is indispensable for achieving all 17 Sustainable Development Goals.”
—Professor Maria Böhmer,
President of the German Commission for UNESCO, interview for the ESD web portal

A tour of award-winning learning spaces, networks and local authorities
Mapping award-winning ESD in Germany

A tour of award-winning learning spaces, networks and local authorities

148 learning spaces 30 local authorities 131 networks

Berlin  Frankfurt  Munich  Cologne

Solid Structures: Award-winning ESD up close

Photography

Photographs

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