



*Baltic Sea
Summer Camp*





Contents

- 2 **Foreword**
Martin Jarrath, UNESCO BSP Coordinator Germany
- 3 **Camp History**
Dr. Wilfried Kretschmer, former Robert-Bosch-Gesamtschule Principal
- 6 **Going International**
Dr. Dennis Stahl, Project and Workshop Manager
- 8 **Environmental Literacy**
Nick Krichevsky, Camp Director
- 10 **Projects**
Student Participants
- 14 **Workshops**
Student Participants
- 18 **Camp Spirit**
Student and Teacher Participants
- 20 **The Future**
Nick Krichevsky, Dr. Dennis Stahl and current Robert-Bosch-Gesamtschule Principal, Dr. René Mounajed



Foreword

For sixteen-year-old students today, the UNESCO Baltic Sea Project is ancient. In 1989, when the BSP came into existence, there was still the Soviet Union and the GDR. In the first BSP Newsletter, the Finnish General Coordinator, Liisa Jääskeläinen, writes in early 1990: "The Baltic Sea Project is primarily an attempt to focus attention on the need for improved environmental education in the Baltic coastal states." And further on, by the same author: "The Baltic Sea Project will work towards sustainable development" - years before sustainable development became an issue for us all.

Since then, the GDR and the Soviet Union have disappeared. Lithuania, Latvia and Estonia have become independent and Russia the remnant of the Soviet Union. They are all member states in the BSP, along with Finland, Sweden, Denmark, Germany and Poland. The names and borders have changed, but the goals of environmental education and education for sustainable development in the Baltic Sea region remain. And regardless of the digital opportunities possible today, it is important and irreplaceable that students and teachers meet each other, in one place, face to face, sitting side by side, working together, getting to know, appreciate and understand one another.

By far the greatest action I have encountered in this direction in recent years is the international BSP summer camp on the Danish island of Årø. Here, where nine nations meet each other for a week, and where the three pillars of sustainability are superbly lived and learned, where exciting projects and workshops take place, with modern, participative methods, where everyone involved learns something great and unforgettable for their lives, this is where the nine nations of the BSP come together to form a "we". The organizational team including Nick Krichevsky and Dennis Stahl from Robert-Bosch-Gesamtschule in Hildesheim puts on a superb camp completely and entirely in the spirit of the Baltic Sea Project!

The UNESCO Baltic Sea Project has been around for a long time, it is innovative, its topics and methods are highly current. The great international BSP summer camp on Årø is an excellent example of this, and will continue to be a flagship for sustainable development and international cooperation for years to come.



Martin Jarrath is currently the UNESCO Baltic Sea Project Coordinator for Germany

Camp History

The activities of Robert-Bosch-Gesamtschule on the Danish island of Årø began in 1989. During this year I took my 12th grade advanced Biology class, consisting of 14 pupils, on a sailing trip through the southern Danish Baltic Sea. The ecology of the Baltic Sea habitat was the focus of our travels. The group maneuvered through the different islands, took water samples, determined the depth, examined small and large algae and became interested in the porpoises and seals, which were abundant. The German-Danish history played an important role. After all, we were travelling through the old Duchy of Schleswig - A region that was reigned German or Danish in its eventful history, but is still not really either German or Danish.

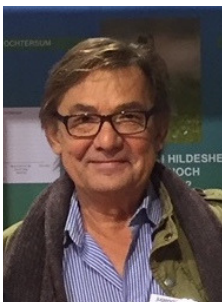
In the evening, a suitable harbor had to be found. It was important to find a small grassy area near an existing dock. After locating just what we were looking for, we pitched our camp. While searching for a fitting port, the excursion group had stumbled upon the small Danish island of Årø, located at the southern exit of the Little Belt, and had pitched their camp directly opposite the village of Årøsund near the Haderslev Fjord. The students immediately took an interest in the island, so they decided to set out the next morning on an excursion around the island and also to the nature reserve located there. Everyone was fascinated by the beauty of the landscape characterized by shallow water bottoms and lagoons. Thousands of common gulls were breeding on a lonely peninsula, about six kilometers into the Baltic Sea. Adjacent to this landscape there was a small idyllic campsite. It was hardly visited and was surrounded by greenery. Using that campsite ecological student trips could be held even without having a sailboat. The conditions appeared ideal; both the uniqueness of the landscape and its impairment by increasing agricultural eutrophication could be directly experienced. Similarly, the history of the island and the surrounding area provided an excellent opportunity for learning about history, geography and the politics of the region. Above all, the beauty of the landscape with its waters, the interesting salt vegetation and the huge collection of birds contributed to a positive aesthetic and ethical attitude towards nature.

In 1989, coincidentally the same year that the UNESCO Baltic Sea Project was started, our own Robert Bosch Comprehensive School Baltic Sea Project was born on the Danish island of Årø. The very next year, a small group of 17 students and several teachers set off on our next excursion. Erhard Thiesen, a competent geography teacher, Hans-Rudi Bratschke, a social science teacher and didactic director of Robert-Bosch-Gesamtschule, and myself, organized the trip. Our bus left from Hanover, and for just 5 marks per person and a few bewildered looks from a group of retired tourists, we arrived on the coast of the Baltic Sea. After arriving on Årø, the participants pitched their small private tents

and cooked their own meals in small groups. These were wonderful days spent together on the island: the students had the opportunity to conduct research in various groups and either observe porpoises or examine the water, observe the different species breeding in the bird sanctuary, or to learn from Erhard Thiessen about the history of the stones and the glacial landscapes making up the island. There were enough topics and work for everyone and in the end, there was still plenty we had yet to explore. Evening campfires on the sea gave it a perfect finishing touch.

These excursions with our upper level students were then carried out year after year. The project developed real cult status among the students so that more and more wanted to go to the island. Soon we were able to obtain our first sponsors. The Lower Saxony Minister of the Environment at the time Monika Griefahn provided support, and in addition the Lower Saxony Environmental Foundation and also Greenpeace became involved in the project. Thus, the materials and infrastructure needed for a long-term excursion to Årø were obtained and our equipment, such as tents, pavilions and cooking equipment was optimized year for year. In 1995, Günter Binstener, at that time responsible for the after-school program, came up with the idea of having middle-school students travel to Årø. The idea was based on the pedagogical assumption that 8th graders were at a complicated age - too old for the playground, but also too young for the disco. In 1996, after a year of planning, the project was put into action. Since then our entire 8th grade has traveled to Årø, year after year. What has changed is that they now sleep in large sturdy tents, walk on a wooden walkway over the meadows, and have parent cooks making meals for them three times a day and even preparing hot water bottles for cold evenings. But the landscape, its beauty and the diverse experience of nature remain the focus for these groups of students. The project is about taking them out of school, out of the classroom and giving these fast-paced digital natives a taste of salt and serenity - learning as an adventure! Thanks to the dedicated teachers and parents, the stay on Årø is a unique experience during a student's school career. The ride on the banana boat including the spectacular fall into the refreshing Baltic Sea and visiting the habitat of seals and harbor porpoises are just a couple of the highlights. The entire project is made possible by a group of interested students of all ages working year round putting up and taking down the entire camp and maintaining all of the equipment year after year. This extraordinary form of help and dedication is extremely rare. This group, originally lead by Frank Glöde and Günter Binstener and now overseen by Nick Krichevsky, has accompanied the project from the very beginning - a stunning example of students making learning possible.

Wilfried Kretschmer and
Lara Cavga, former RBG student



Dr. Wilfried Kretschmer, former
Robert-Bosch-Gesamtschule
Principal, currently works for
the Deutsche Schulakademie



Going International

8th grade students at Robert-Bosch-Gesamtschule have been attending our self run summer school on the island of Årø for over 25 years. During their week long stay, usually in weeks after their summer vacation, they work on biological and historical aspects concerning the island and the surrounding waters. In 2015 we were invited to take part in a national German teacher meeting of the UNESCO Baltic Sea Project, where we presented our concept to other schools present. Astonished by the scope and infrastructure of our summer school, we were bombarded with different questions about how we run things, funding, transportation, etc. One of the questions, though, changed everything. We were asked whether there had ever been any other students at the camp, for example from a Danish school. No, never, and we were not sure why. That same year we started brainstorming about what might be possible, how to get funding, the goals we should set for a new international summer camp.

In our opinion, a key aspect for students growing up in a globalized rapidly changing world is a global comprehension of the environment and its features. The problems we and future generations of the Baltic Sea nations will face are far too complex and complicated to be solved by countries individually. The Baltic Sea environment does not follow along national boundaries, so people from all countries will have to communicate with each other. They will have to discuss possibilities and find solutions on how to preserve this precious ecosystem for generations to come. Intercultural communication is consequently inevitable.

The solution was to take our summer school one step further. Funds were acquired from the Arconic Foundation to obtain equipment and further develop the infrastructure of the camp. We established a concept of projects and workshops we thought best suited for students to develop environmental literacy and attain global citizenship. We travelled to Riga, Latvia, to meet with all of the UNESCO Baltic Sea Project country coordinators and introduced our camp. They were convinced. After a year of planning and organizing we invited schools from all countries surrounding the Baltic Sea to attend our first International Baltic Sea Summer Camp on Årø. We were ready to go international!



Dr. Dennis Stahl, Project and Workshop Manager, is a teacher at Robert-Bosch-Gesamtschule



Environmental Literacy

We learn to read and write, thus becoming literate. After several years of swiping a touch screen and googling our way through the world wide web we might call ourselves computer literate, or even digitally literate. Cultural literacy, scientific literacy and political literacy have become an essential aspect of our upbringing and education.

But, consider this: In the time it has taken to write this article we have lost another species, two million tons of CO2 have been produced, several hundred million tons of Antarctic land ice have melted away, and a few hundred square kilometers of the Great Barrier Reef have died. The development of 'Environmental Literacy', a term not even known to Wikipedia, is becoming more important than ever. By definition, it refers to the knowledge about the interdependence of ecosystems and human systems and sustainable measures enabling their coexistence.

The concept of the Baltic Sea Summer Camp is based upon the idea of bringing students and teachers from around the Baltic Sea region together to learn from one another and especially to learn how to cooperate internationally in order to solve global problems. In the same context the content of this camp is built around the idea of developing environmental literacy by working and learning together in workshops and projects using the Baltic Sea as our subject matter.

The Environmental Literacy Council notes that the environment has found its way into school curricula around the globe, but that many aspects are still taught independent of one another, whether in the natural or social sciences. This fact, together with the adoption of the sustainable development goals as part of UNESCO's Agenda 2030, has convinced us entirely and whole-heartedly to embrace the 'subject' of Environmental Literacy at our camp. We hope and believe that students from around the Baltic Sea will use this possibility to become more literate, more knowledgeable and more aware of global environmental issues.

I look forward to reaching out to dozens of new students and teachers from around the Baltic Sea and be able to welcome you at our next international Baltic Sea Summer Camp!

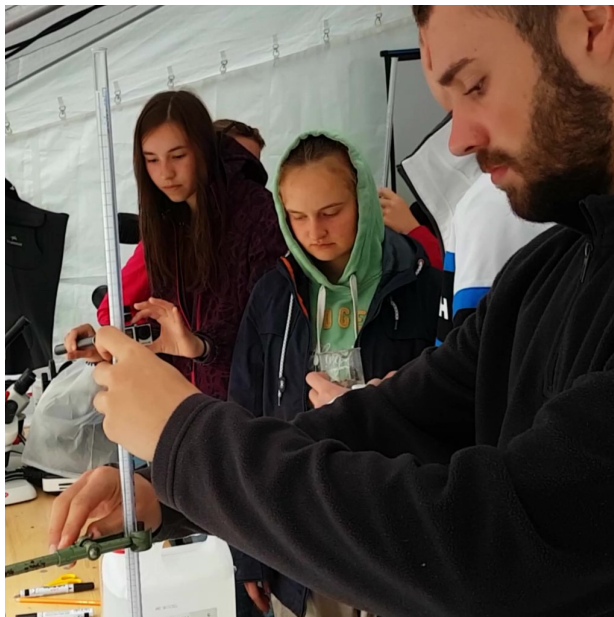


Nick Krichevsky, Camp Director,
is a teacher at Robert-Bosch-
Gesamtschule



Off with the boat to count harbor seals for 'Predators of the Baltic Sea'

Modeling the island for 'Coast to Coast'



Measuring the CO₂-concentration for 'Acidification of the Baltic Sea'

Projects

Projects enable students to gain a deeper understanding of a chosen topic about the environment of the Baltic Sea. To achieve this goal, students work in groups of mixed nationalities on their specific topic for several hours every morning. Under the guidance of a project leader, usually a teacher or external professional, students discuss and decide upon the focus of their project and then bring it to life using their own individual and creative ideas. At the end of the week, the groups are given the opportunity to present their results to the rest of the participants. Furthermore, it is important to us that the students function as multipliers: They should go back to their school and pass on their newly acquired knowledge. Below are some examples of past projects.

Saving the Baltic Sea

The media campaign “Save the Baltic Sea” was a campaign made to change the public’s view about the Baltic Sea. The purpose was to research problems pertaining to the Baltic Sea and create a video that would make the viewer sympathize with these problems and want to make a change in their life that would help the Baltic Sea environment. We started by researching the problems and then we interviewed several people, including teachers, and asked about their view of the Baltic Sea and what they know about the problems. We found that people did not know a lot about the problems and what they can do to change things. We decided to make a simple video about the subject that would be easy to understand and inform the viewers.

Maya Birk de Linde, Student

Clean energy – clear decision?

Similar to solar energy, wind energy is a fast growing industry. We see many wind farms all around the world, also many here in Denmark. There is no doubt about the fact that wind energy is going to reduce our reliance on fossil fuels like coal, oil and gas in the future.

In our project we took on different roles and discussed whether a wind farm near Årø would be a good idea for the inhabitants of Årø, but also considered aspects such as the effects on surrounding marine life. The purpose was to do research about the different groups of people, interests and also laws and regulations and to see if we could come up with an applicable solution based on the different demands and opinions of the various interest groups.

Freja Rønne Breiner, Student

Predators of the Baltic Sea

Our work in the project consisted of sailing out into the Baltic Sea and counting the animals. At the end of the week we were ready with a presentation of our findings and visual illustrations of what we saw and learned about these creatures. Primarily, our focus was on three animals: seals, porpoises and a species of birds called cormorants. We counted the number of these animals and compared it to the data we had from a former census- the latest being from 2008. We knew that, since the last census had been in 2008, we couldn't count on finding the same number of animals, but a part of our research was to, as far as possible, create new data and try to understand how and why these numbers would be different - what could have an influence on the increasing or decreasing amount of seals, porpoises and cormorants?

All in all, we learned a lot about the nature of the animals of the sea surrounding Årø. We learned what could impact the different big and small animals in the food chain, and what a possible solution to the problem could be. It's really all about figuring out how to maintain a balance, not only among the animals of the Baltic Sea, or any other body of water for that matter, but for the entire environment and for our entire planet.

Line Lindholm and Andrea Rosenberg Lindequist, Students

Microplastic

If you have ever gone for a walk along the beach then you may have noticed the huge amount of plastic trash that lies around on the shores and in the coastal waters. But what you have not seen is the numerous amount of microplastic that hides under the surface of the water along side the wildlife living there and the microplastic that hides in the sand under your feet. This is a much bigger problem than people are aware of nowadays.

Karen Abildgaard Poulsen, Student



Coast to Coast

Coast to Coast was one of the projects offered at the Baltic Sea Summer Camp on Årø. The focus of the project was to map the different beaches around the island and to find out why they look the way they do.

A beach is defined by its placing in the outer part of the mainland. To characterize a beach you study different characteristics such as the sand, water and of course the life found there, for instance crabs, fish, shellfish and so forth. There was a lot to consider during this project, such as the role of algae, which lives close to the surface and can end up blocking the sunlight from plants living towards the bottom. This can end up affecting an entire beach ecosystem. With this knowledge in mind we went out exploring and analyzing the different beaches on Årø: Harbor Beach, South Beach and Baby Bay. After returning home to Aarhus we continued our studies by conducting a chemical analysis of the different amounts of nutrients in the water.

By analyzing the beaches, we found out that there are some major differences in the landscape and the life living there. These different beaches are characterized by different factors that influence what types of plants can grow there, and which kinds of animals are able to live there. Årø has changed its shape throughout the years due to the continuous currents at the south side of the island. The island has a very pretty landscape, and the different make up of its coast add to the fascination.

Christian Bach Sørensen, Student





Workshops

Workshops give students the chance to get a brief insight into different aspects concerning the Baltic Sea. There is a wide range of different topics to choose from, for example Species Identification, Acidification of the Baltic Sea, Natural Land Art or Global Citizen 2030. Working in small international groups with changing group members, students also improve their social skills and learn to cooperate on an intercultural level. Below we have decided to give you a brief insight into various workshops which have been offered in the past. Of course, it's just a taste - for the whole meal you'll have to come by and experience it for yourselves!

Baltic Sea from below

Discover the world under water while diving in the Baltic Sea. Dr. Wilfried Kretscher took students scuba diving and explored hidden ecosystems along the shorelines.

The global citizen 2030

2030 is when today's seven year-olds are thirty. What will the world look like in 2030? And how will you contribute to make it better by then? Discuss, discuss, discuss! Our topic was sustainability and global citizenship. Nothing more, and nothing less, than OUR future.

Naturally delicious

Discover the spicy herbs and sweet fruits of the Årø salt meadows and try a few simple and sweet recipes straight out of the Baltic nature. Students prepared jams, salads and fried sea weed. Delicious!

Recycling and Eco-Products

Do you wonder what to do with your old plastic bottles? We learned how to recycle them and turn them into cute bird feeders. A little bit of resourcefulness and creativity can go a long way!

Banana-Boat-Challenge

A boat, a rope and a big yellow banana...hold on tight or else you'll be exploring the Baltic Sea from below! None other than our Camp Director himself got behind the wheel of the boat and plowed through the Baltic Sea with students trying to stay afloat.



Biological diversity of the Baltic Sea

There are a lot of different organisms on Årø, but how do you know which species they belong to? We learned how to identify species of the Baltic Sea and become species specialists!

The Baltic Sea Harbour Porpoise

Time to go whale watching! Okay, they weren't quite whales, but it was still amazing to see several Harbor Porpoises and dozens of Harbor Seals in their natural habitat. We also had some wind, so the boat ride turned into an adventure of its own!

Natural Land Art

Be creative and use materials from nature to produce works of art! We collected everything we needed from along the different coastlines along Årø and produced several pieces of Baltic Sea artwork.

Anatomy of different Baltic Sea animals

We analysed the anatomy of fish and other animals found on and around the island. Also we found out what blue mussels are capable of and why they are important for the ecosystem of the Baltic Sea.

Plastic in the Ocean

In this workshop students evaluated the efficiency of different methods used to investigate the total amount of beach litter and its sources. None of us expected it to be such hard work collecting microplastic.

Fishing in the Baltic Sea

You knew there are fish in the Baltic Sea, but how do they taste? We built our own fishing pole out of mostly natural materials, scavenged for bait, and went out fishing. It tasted great!

Water quality analysis

Get wet and examine the quality of the water near the coast of Årø! We did a chemical and physical analysis of the water and searched for biological indicators such as sea weed or fish prawns, which turned out tasty as well!



Camp Spirit

We asked students and teachers about the camp, what they gained from it, and in general about how they would describe the camp spirit in a few words.

A week full of fun developing interpersonal relationships
- Enno Reif

The Baltic Sea was the one thing the students from all the different countries shared in the beginning but during the camp it became so much more. Together we investigated nature, we cooked with fresh herbs from the sea and we sang along at the big beach bonfire. We made new friends and in the end we shared more than geographical coincidence. We shared the wish to protect our environment for our common future. - Lisa Schinkel

The camp exceeded my expectations. The projects were designed to be interesting and very hands-on. We were given a lot of room for expressing our own ideas which lead to very new and interesting results. - Lotta Löwe

A great chance to enjoy scientific field work surrounded by beautiful Danish wilderness in the company of many young and open-minded people. Even a couple of days with straight rain could not harm the cheerful spirit of the young scientists - a wonderful get together in the Baltic Sea region!
-Dorothee Conrad

I have begun to think more about the environment and the climate - Johanne Behr Eliassen

One night the staff prepared a treasure hunt. There was something very special about cooperating with students from other countries at an international camp to solve a problem. - Freja Breiner



Camp Director Nick Krichevsky together with the Project and Workshop Manager Dr. Dennis Stahl

The Future

Today, the speed with which everything around us is changing, is increasing. These changes, and those to come, will result in new challenges, sometimes also problems. To deal with these issues we have begun to understand that cooperation among countries and cultures is a necessity. And because the challenges of our time are of a global nature, global cooperation is needed more than ever before.

This camp, and for that matter the entire essence of the Baltic Sea Project, is about more than coming together to learn how to solve a specific problem. We are coming together to learn how to solve all future problems to come – and the key is cooperation. And to cooperate on a global level, we must get to know one another, learn about each other and from each other. We need to be speaking the same language, be eating the same food at the same table and be working, day by day, hand in hand, together. This cooperation must become second nature.

- Nick Krichevsky

The first International BSP Summer Camp on Årø was a complete success, however, there are still aspects we can improve for future camps. One possibility is more involvement of teachers from other schools in projects and workshops. We already had several teachers conducting workshops, but this could be developed further. Consequently, this would lead to a broader variety of topics encompassing more issues concerning the Baltic Sea. Another goal we have for the future is more intense cooperation with the UNESCO Baltic Sea Project teams and also increased collaboration with external international organizations, for example universities or environmental organizations. Taken together this will all add to developing the key aspect we are aiming for: educating students from all over the Baltic Sea region, helping them become environmentally literate global citizens.

- Dr. Dennis Stahl

When students and teachers start their journey to the Baltic Sea Summer Camp, they are looking for more than just an international encounter: they want to explore the ocean, coasts and the environment in general. They want to learn how to make a difference and what they can do to tackle big global problems. For this they leave their comfort zone. They do without wellness, their tent becomes the classroom, and the island, their school. And for the future of this project, I wish all participants that when they re-enter their comfort zone, they will retain the impressions they have gained in nature, take them back to their community and tackle those big global problems.

- Dr. René Mounajed,
current RBG principal

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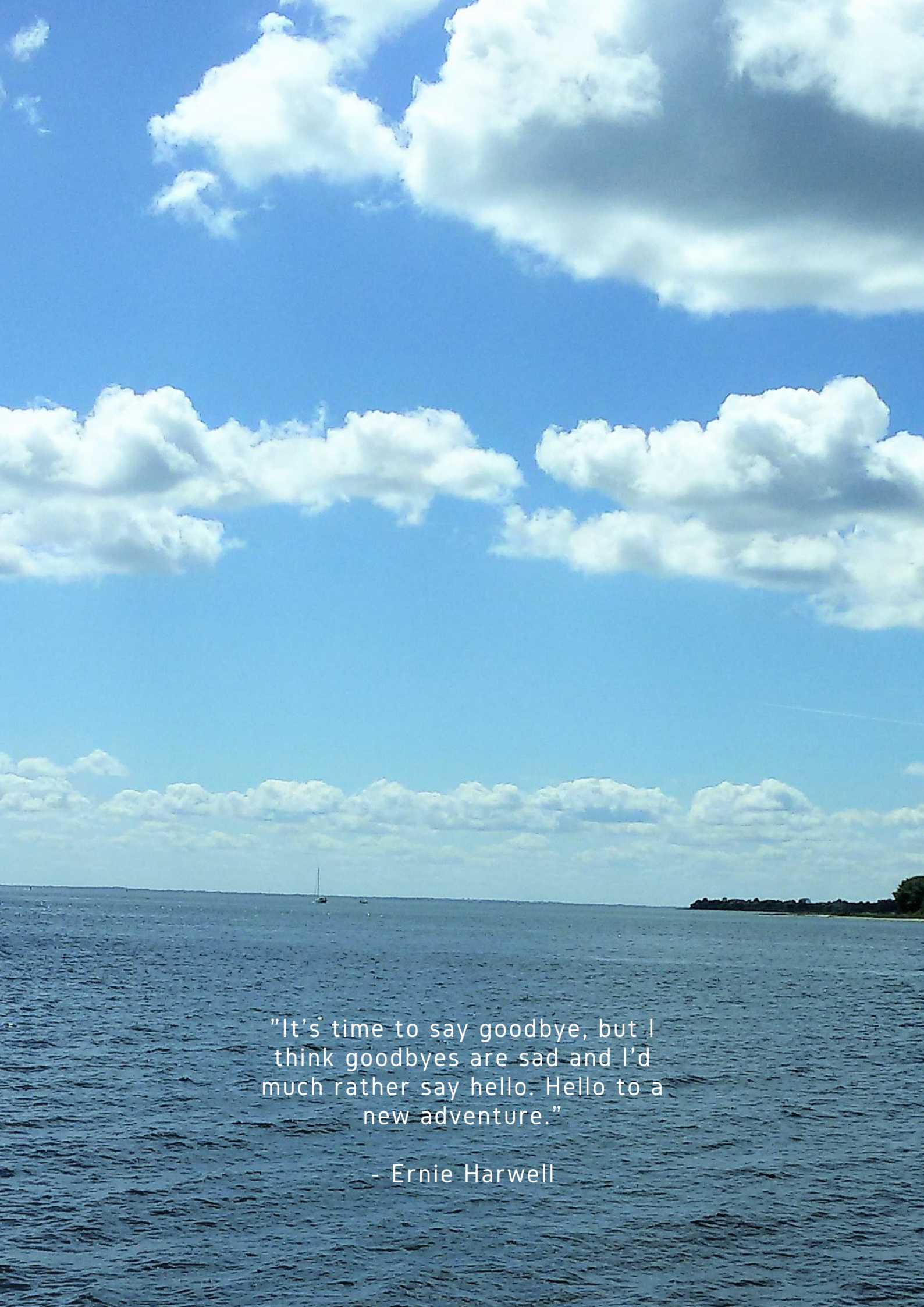
The Baltic Sea Project



Organisation der
Vereinten Nationen für
Bildung, Wissenschaft,
Kultur und Kommunikation



Robert-Bosch-Gesamtschule
Hildesheim
Mitglied des Netzwerks der
UNESCO-Projektschulen



"It's time to say goodbye, but I think goodbyes are sad and I'd much rather say hello. Hello to a new adventure."

- Ernie Harwell