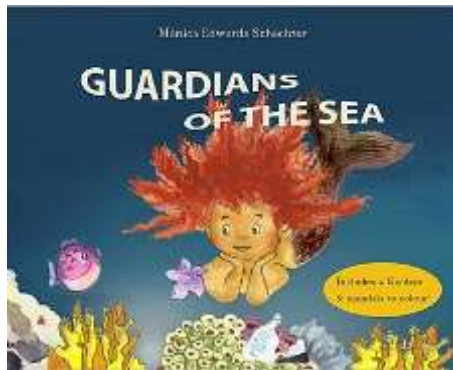


Interview with Mónica Edwards Schachter, author of "Guardians of the Sea" -

<https://www.mundusmaris.org/index.php/en/encounters/scientists/2416-valu-en>
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We met Mónica Edwards Schachter years ago at an innovation meeting in Madrid, far from her native Argentina. Through sporadic contacts we kept in touch, each one deeply involved in their respective projects about ocean literacy and protection. The shared enthusiasm for mobilising the sciences and arts together for child and adult education in innovative ways made our roads cross again in the occasion of the launch of her beautiful children's book *Guardians of the Sea*,

as part of her project MonValu just before it became available on Amazon. This is an excellent occasion to learn more about the book currently available in Spanish and English, but already in French and Portuguese translation and her plans for the future.

Mónica lives in Valencia, Spain, and does a lot of educational work with local schools in a disadvantaged district. Her research and innovation work have won several prizes and recognitions, highlighting her essay *Networks for Peace (redes para la Paz)*, awarded by the Patronat Sud-Nord of the University of Valencia in 2004 and the IBM award in "Science in Action" contest in 2012, supported by the Spanish National Research Council, for the development of a role-playing game on climate change.

Q: Hello Mónica, so happy to catch up with you again in the occasion of the launch of *Guardians of the Sea*. What's the story of the book in a nutshell?



A: The idea was born with a role-playing game that I developed in a fictional scenario, a place named Valu. Valu is a metaphor for

Tuvalu, a small country in the middle of the Pacific that is less than five meters above sea level. I mulled over the life of its inhabitants as their fragility represents the fragility of all humanity. This is why the name of the game is "We Are All Valu" and was the origin of the MonValu project. This first book talks about a very particular tribe of mermaids who invites us to be Guardians of the Sea and to realize a plan to care for the sea. Little mermaid Kai and his grandmother Vanora remind us of an indissoluble bond between life and ocean and what the famous explorer Jacques Cousteau said: "*We have to save the ocean if we want to save humankind.*"

Q: That's really touching. What's the story behind the story. What enticed you to develop the book?

A: My experience of many years working with high school teachers and students and also as a researcher show that we act in the world according to the way we perceive it. In this respect, what worries me the most for a long time is what we adults are doing concerning children. Childhood and family experiences do indeed impact children's perceptions of the world. In fact, such early perceptions and feelings are decisive to how we all project our lives as people as well as future citizens and workers. The children of today are facing a new set of challenges and global shifts that were unimaginable to our parents. How do we influence the way children look at the world? How are we preparing girls and boys to face the challenges of climate change and accelerated digitalization? MonValu stories were designed and written around these questions trying to see the world as a child would see it. At the same time, the MonValu series is part of a broader project that combines a perspective of digital humanism and sustainable development. The stories and complementary resources were born of my desire to facilitate learning opportunities and increasing the chances of children and teenagers in disadvantageous situation.

Q: You use these interesting characters to draw attention to the woes of the ocean and its inhabitants, yet the story is not one of gloom and doom. How to you get the message across that there is hope and that it's worth engaging for a healthy ocean?



A: In the story, Kai is a little and very curious mermaid who discovers the environment that surrounds him like any child. He marvels at the greatness of the sea and asks many questions. Kai faces many problems, although he does not really know why or where they come from. He goes to the beach and asks himself: Where does so much waste come from? In a similar way that a child on a beach in Honduras asked, as it happened recently. And children in many places on the planet.

The focus is on facts and the call to action: if there is a dolphin in trouble or a small albatross wants to gobble up a plastic lid, the whole tribe can help. The most powerful message is in what his grandmother Vanora and the tribe transmit to him: taking care of the sea is something inherited and precious because without ocean and without water there is no life. The body of mermaids, like that of human beings, is "almost all made of water." Beyond the problems, it is always important to find solutions and organize well! I love the idea that Valu also reminds us of the notion of "value".

Q: What do you consider the most important threats to the ocean?

A: Climate change, global warming, and the enormous impact of plastics appear as spearheads at a planetary level. But ocean health depends on multiple factors that represent complex challenges, such as the effect of overfishing and exploitation of marine biodiversity related to the problem of human food. Destruction of marine habitats and, in particular, coral reefs have dramatic consequences for life. Many relevant threats lie in the pressure on the coasts of tourism and other economic activities that produce different forms of pollution.

Q: What do you want your readers to do about them? Which are the highest priorities for learning and action?

A: *Guardians of the Sea* and all the books in the MonValu series invite us to feel through emotional and story-learning experiences, promoting values such as care and sustainability. Each story focuses on developing empathy, imagination, creativity, and critical thinking. They also include engaging educational tools to work at home or at school. For instance, *Guardians of the Sea* contains a Kanban template and a mandala to colour. Kanban is useful for organizing children's activities and a good plan to care for the sea. Additionally, the project involves a laboratory to share and co-create learning experiences with activity guides and games focused on the development of STEAM competencies (Sciences, Technology, Engineering, Arts and Maths - paper circuits, wearables, digital projects with the use of design thinking, etc.).



I think that the ocean becomes a priority in the 2030 Global Sustainability Agenda. Many Sustainable Development Goals are linked to the ocean and climate change issues. We still know very little about the vast majority of the ocean. Most of us are unaware of the role of the ocean for life and to what extent our health depends on ocean health. It is typical to see a very excited father or mother taking their baby to the beach for the first time. Although this is one of the fondest childhood memories, most children hardly know the creatures that inhabit the sea. Excepting communities that make a living from fishing, people generally ignore the ocean services in terms of food and medicines. In this respect, I fully agree with the UNESCO 2021-2030 Decade of Ocean Sciences for Sustainable Development, and MonValu is aligned with their goals.

Q: Several years ago, you developed a piece for UNESCO about ocean literacy. Can you tell us more about it? What happened?

A: In 2004 I wrote a book where ocean literacy was included as part of a holistic view of sustainability and peace. This content was applied to both research and teaching activities at different educational levels. Such experiences revealed many barriers between a change of perceptions and commitment to act. Climate change and global warming were neglected for a long time and are even being discussed today. Efforts and progress in advancing towards sustainability have been varied, and the response thus far has not been ambitious enough. It is a dialogue always in a slow advance.



In the last two decades, the rules of the game to communicate and empower people have dramatically changed. We are immersed in an accelerated process of digitalization where messages depend on the role of social media, digital marketing, etc. and emotions prevail. In the current pandemic scenarios, we have learned relevant lessons about empathy, solidarity, strategies for action as well as the role of emergent technologies for social good. Empowerment is shifting to co-power as the power to act through a more horizontal collaboration and knowledge sharing. The good news for the future we are building is that young people, and particularly millennials and generation Z, are more oriented to sustainability than previous generations. Nevertheless, while we are fighting against global warming and plastic pollution... thousands and thousands of disposable masks are causing enormous plastic waste.

Q: What are your next plans?

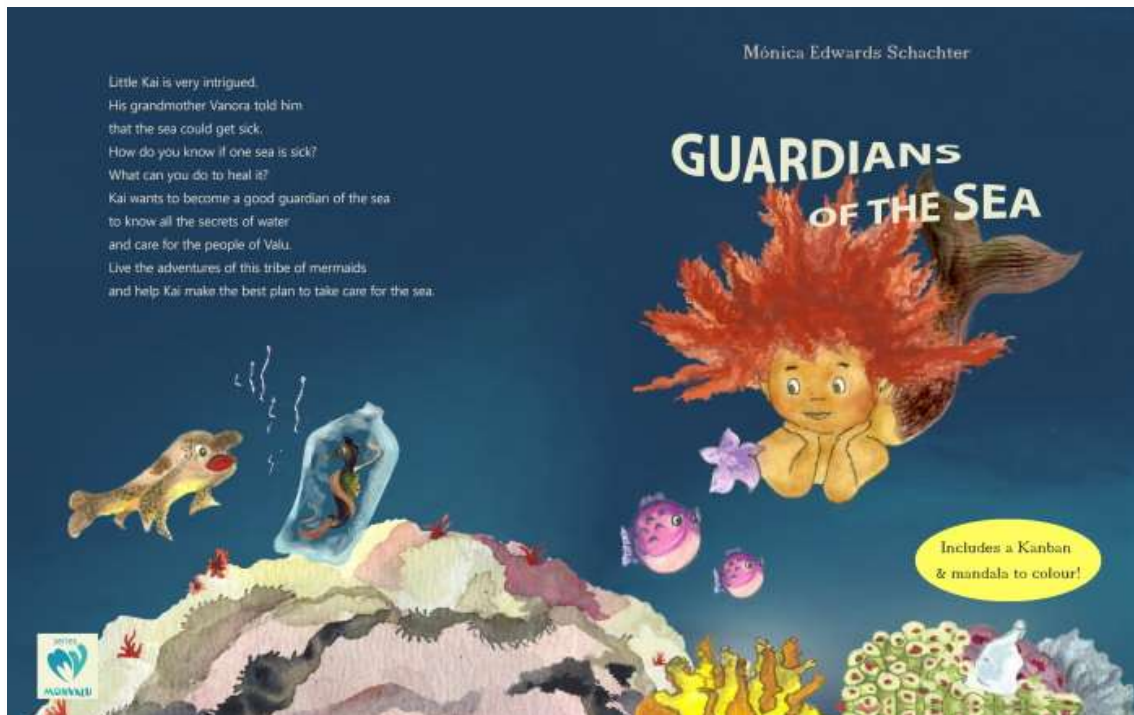
A: The French and Portuguese versions of *Guardians of the Sea* will be available in the coming weeks, as well as the MonValu website. *Ku & Kala, a love to save the planet*, which is the second book of the series, will be launched next November. This fun love story focuses on empathy and the power of change.

We are incorporating activities coming from different cultural environments into our lab community. This is very exciting because we can learn so much from each other. There are cooperation projects underway in Spain and Portugal to work with children but also in the training of secondary students and school teachers. Due to the pandemic, we are incorporating more resources and online activities, using visual thinking and gamification. These are especially useful with Generation Z, who are digital, multitasking, creative, visual, ... and very impatient. From an educational point of view, we are interested in knowing the real impact of STEAM competencies on their lives. For example, to what extent putting empathy maps into STEAM practice contributes to ocean empathy and is an instrument for self-esteem. We also want to dive into other realities and investigate more about how children from different parts of the world perceive, care and love the sea.

Q: Dear Mónica, thanks for your extensive and informative answers. *Mundus maris* asbl is only too happy to help disseminate the MonValu book and its serious, yet very enjoyable story.

Cornelia E Nauen asked the questions for *Mundus maris*.

The print version of the book is available on Amazon, for the time being in [Spanish](#) and [English](#), but shortly also in other languages, namely French and Portuguese. The e-book version is announced for early November 2020.



Early praise for the book

"The stories are a great resource for the development of thinking skills in kindergarten and elementary school children. Mónica Edwards-Schachter offers us, in her beautiful books, also tools to work on emotions and the organization of action in mobilizing for a sustainable future, which is very useful for teacher training."

Dr. Ileana Greca Dufranc, Professor of Didactics of Sciences

"A beautiful book with a message of responsibility towards the sea and caring for the environment. An illustrated story to reflect and discuss nature and human impact."

Dr. María del Carmen Patricia Morales, philosopher and expert in ethics.