# The book of challed the S

or the story of a penguin who arrived by hang glider to find out how we use water

> Text: Joana Paraigües Il lustrations: Armand Traslation: Maithers Tree





Col·lecció la banyera



or the story of a penguin who arrived by hang glider to find out how we use water



Text: Joana Paraigües - Illustrations: Armand

#### Let the EscolAQUA flow!

"Tap water is guality water" —so says the slogan which we use at the Empresa Municipal Mixta d'Aigües de Tarragona to give people confidence when using this daily, essential resource.

EscolAQUA aims to start a debate regarding the advantages of using tap water into the educational community, both from an economic and environmental perspective. Just as recycling culture, energy saving and the consumption of local products have been fully integrated into the management policies of the educational community, here in Ematsa we think that tap water should also be included; and for that reason, we wish to provide resources and information - in a user-friendly, open and innovative way - to make this possible.

Here in Tarragona, we have a complicated relationship with tap water. A lot of people are used to drinking bottled water, but we all know that this practice needs some urgent rethinking and we want to show that tap water is an absolutely safe, healthy alternative, and is a lot more economic and sustainable, especially given the fact that we are living in the context of what we do not hesitate to call a climatic emergency.

At Ematsa we believe that it is part of our corporative social responsibility not only to be financially transparent, but also to explain the thorough sanitary control of the water which is distributed throughout Tarragona, La Canonja, El Catllar and Els Pallaresos so that it may be consumed with as much confidence as any bottled water.

Through EscolAQUA, we wish to transmit the advantages of using tap water in a didactic and attractive fashion. The project started off in a small format, but with the clear intention of growing larger so that it would eventually form a collaborative network enabling an easy, agile way of conveying information, while also providing resources, ideas, and synergies which will stimulate thought and generate opinions and criteria concerning the consumption of tap water.

The book you are holding aims to explain the first stages of this project, as experienced by its first protagonists. Here you will discover their experiences, ideas and conclusions as they discover, or perhaps we should say rediscover, the uses water can be put to. They might seem like a few small drops in the ocean, but we sincerely hope that readers will find these drops inspiring and liberating. We would also like to see a fresh spirit of reflection concerning the responsibility we all share as regards the inclusion of many other drops which will fill our society with justice, respect and sustainability.

Thank-you.

The Ematsa communications team.

Published by Piscina, un petit oceà and Ematsa



Original concept by Joan Rioné Tortajada



Text: Joana Paraigües Illustrations: Armand www.armand-art.com Translation: Matthew Tree Printed at Indústries Gràfiques Gabriel Gibert, SA ISBN: 978-84-121292-3-6 Tarragona, spring of 2020

https://piscinaunpetitocea.com

All rights reserved for the text and illustrations.

#### How does one start to make a book?

It is a wonderful thing to start a book, but not many people stop to think about it, basically because when you open a book in order to read it, it's already been made. So now we'll see how a book is born, this book in fact, the book that you have in your hands (or your feet, if you read upside down).

To this end, a meeting has been set up with Joana Paraigües, a narrated writer who knows how to make words dance; Armand, an illustrated illustrator who can put rhythm into ink stains, and Octavi the secretary who...knows how to do a little bit of everything. "Friends!", Joana calls out, "I've asked you here because I'm making a new book." "Fantastic!" shouts Octavi the secretary, who, all conscientious, starts taking notes. "This book is going to be special, wonderful, brilliant! We're going to talk about water and the uses it can be put to!" Joana adds. "What?" Octavi the secretary looks up. "I like the idea!" says Armand. "Water's boring," Octavi complains. "The path that water takes to get to our homes and how water can be used, is a great adventure which needs to be explained," Joana points out, "To make this book we need to be better informed, we'll have to go and ask schoolchildren some questions," she adds. "Schoolchildren? Whoever's going to go and talk to them?" Octavi the secretary sniggers. "You are!"," says Joana.

"That's what you get for talking out of turn," mutters Armand. "So I'm going to be story's main character, right?" Octavi asks. "You're an unattractive, two-dimensional character," says Joana. "Unattractive and two-dimensional?" Octavi is choking on his own words. "We need somebody original, who's unusual... I thought a whale would fit the bill. What do you think, Armand?" The writer is getting to work. "Whales are too big to fit into the book," the illustrator points out. "What about a piranha fish?" Joana suggests. "It's dangerous...it could bite readers' fingers when they turn the pages," Armand isn't at all sure about that idea.

"At this rate, you'll end up using a penguin," Octavi says with a laugh. "A penguin!" shouts Joana. "I've always wanted to draw a penguin!" Armand says happily. "I said it as a joke! A JOKE! It's a crazy idea!" answers Octavi. "Books are crazy things!" says Joana. "It isn't cold enough here to go around drawing penguins!" replies Octavi. "I'll make some cool pages," Armand says, by way of a solution. "And how are we going to get it over here? Penguins live a long way away!" Octavi says, exasperated. "With a hang glider!" says Armand, "It's cheap, ecological, and easy to draw." "Let's get started!" says Joana, "Octavi, get ready to welcome the penguin and take it to the schools! Here's a map to help you start the visits," she adds, "Our main character will be arriving on the next page!"

And that is how this book begins. The EscolAQUA book or the story of a penguin who arrived by hang glider to find out how we use water.



#### What do we know about water?

Starting with the first school they come across, the penguin and the secretary visit lots of others to find out how water is being used. But first, we need to take a look at what people know about it. Some kids have said the following...

0

## A SHOWER OF IDEAS

IT FALLS FROM THE SKY AND MAKES YOU WET IT CAN BE A LIQUID, A GAS, OR SOLID DROPS, STEAM, ICE CUBE RIVERS WATER'S DIFFICULT TO HOLD IN YOUR HANDS! THERE'S A LOT OF IT IN THE SEA CLOUDS DRINKABLE/NOT DRINKABLE IT'S USED FOR COOKING ... AND TO KEEP OURSELVES CLEAN YOU NEED IT TO LIVE (IT'S ESSENTIAL!) FRESHWATER ISN'T SWEET, BUT SALT WATER DOES CONTAIN SALT WE USE IT EVERY DAY YOU CAN SEE IT AND DRINK IT IT'S REFRESHING WATER IS A TREASURE!

#### Now we need to ask some questions

We all know how to make a survey: you ask the same question to lots of different people. So if the penguin wants to know how we use water...we'll have to start by thinking up a question! But which one? A little girl puts up her hand:

"We need water to live and that's why we get thirsty. I suggest we ask about where the water comes from that we use every day."

A murmur ripples through the class, everybody is in favour of the idea. "Fantastic!" someone shouts. The question is going to be this: do you drink tap water or do you buy bottled water?

The EscolAQUA pupils get cracking. They ask at home, at school, in the hairdresser's... They even ask a neighbour's friend's cousin's parrot. After all that work, they look at the results.

And when they analyse the results, they discover that even though tap water reaches people through pipes without leaving any residue, is much cheaper and has passed all the safety controls...Most people go for bottled water. Why?

"The reason is the taste," says one child as he drinks from the tap, "tap water tastes a little bit of chlorine, a product which is necessary to make sure the water is healthy enough to drink. But if we leave it for a while, the chlorine evaporates and that taste vanishes. I love it when it's chilled!"

And what does the penguin think of the results of the survey?



#### Bottles, bottles, bottles...

The penguin opens his beak:

"Bottled water is delivered by road, with thousands of trucks, cars and vans moving it all over the place at a considerable cost to the environment. On top of which, by using so many bottles we're making a mess of the whole planet! The impact of non-reusable bottles is huge and harmful to all living beings. The problem gets even worse when the plastic ends up in the sea. "What can we do about it?" asks a rather worried girl.

"Hands are the answer! I'm referring to yours, because we penguins have got flippers," he clarifies, "You can REDUCE the consumption of bottled and packaged products and satisfy your hunger and thirst without any wrapping. Drink tap water, buy food loose or at least avoid packaging which doesn't contain much product."

"Interesting, interesting," says one child, frowning. The penguin goes on talking:

"You can also REUSE by finding new uses for things, giving them a longer life and reducing the amount of rubbish. Finally, you need to RECYCLE, putting all waste products in the right container. The penguin stops and thinks...

"And I've also got an idea that you'll like. In five chapters' time, we're going to clean the beach!"



#### Time for a story

"Do you like listening to stories?" asks a story-teller who's visiting the school today, "Well, I'm going to tell you one that really happened!"

A long time ago, on a day just like today, I was sitting in my garden, all set to drink a cup of cocoa. As I brought the cup to my mouth and was about to enjoy its taste, a cloud passed and let fall a drop which by complete coincidence ended up smack in the middle of my cup and splash! I was splattered all over. Then I looked up and, as soon as I saw them, I fell in love with those drops of water.

I like water drops so much, that one day I followed them to find out how they live. Would you like to join me?

This journey starts in the sea, when you're bathing in it. Because the drops, before turning into freshwater, are salty and swim through the ocean, playing with the fishes, caressing the seaweed, tickling the tummies of the whales and the sun heats them up and heats them up...it heats them up so much that the drops take off and disappear upwards and instead of swimming in the sea they fly through the air! When they reach the sky they get together with their friends and all together they form big clouds!...Have you ever played at guessing cloud shapes?

But the drops go up so high that they get cold: achoo! And they turn back into water and as they are heavier than air, they fall from the sky in a most amusing way. They can end up in the sea, in the forests, on top of an Paraigües...And it's also possible that a drop can fall right into a cup of cocoa that someone's about to drink and splash! that person'll get splattered all over and will then look up, amazed, in love with the drops...

And that is exactly what happened to me, a long time ago, on a day like today, when I was sitting in my garden.



#### We visit the water company

Caps, comfortable footwear, water bottles and sandwiches in their rucksacks. The EscolAQUA kids are on an excursion to the premises of a water company.

The place is at the top of a small mountain. The reason for that is that this way the water, thanks to the force of gravity, can be distributed more easily. A woman technician from the company is giving the guided tour:

"Have any of you ever been inside a water tank?" Everybody looks at each other, surprised.

The visit begins in an old water tank converted into a pathway, the path taken by the water! The group discovers that people have always wanted to have drinkable water close by. The Romans took a lot of trouble to achieve this and built aqueducts, thermal baths and fountains. But there haven't always been taps like the ones at home, and a great deal of effort before they finally came into existence.

The children follow the path in a stream. They see the control room, the offices but then all of that looks tiny compared to the vast water tanks which can supply an entire city!

"All this talk about water has made me thirsty," says one child. "Well you wouldn't finish this lot if you spent a whole year drinking it!" answers another. The group laughs.

> Meanwhile, the penguin looks at it all and discovers that humans and animals have something in common: they need cool, clean water in order to live.







Si Mi

Water is taken from the natural environment. It is made potable, so that it can be consumed.

14 811

d'.

-

It is transported using big pipes.

It is stored in tanks.

It is distributed to all homes and industries.

It is used for drinking, cooking, cleaning, watering...

Water ends up in the sewer network.

It reaches the sewage treatment plant, which removes contaminants and returns the water to the natural environment.

The water is analysed at every stage of the cycle in order to control its quality, with special attention being paid to health factors before it is consumed.





#### What can we do at home?

Water returns to the sea. That's why we have to look after it and avoid polluting it. We can do so many things to help!

In the kitchen, we should use moderate amounts of oil, and any oil left over should be put in bottles and taken to the local waste recycling centre. Any remains of oil in the frying pan should be cleaned with paper towels.

The toilet is not a waste paper basket! We shouldn't throw wet tissues, or ear swabs, or cotton wool, or medicines, or food leftovers, or paint, or solvents into the toilet bowl...

When we clean, we should use just the right amount of soap and detergents...and concentrated ones if possible, as they pollute less.

There is not an infinite amount of water and small efforts give big results. If all schoolchildren in the cities and all schoolchildren in the country, and all the children in all the schools all over the country, and all the children in all the schools on the continent, and all the children in all the schools in the world were all to do something about this...Wow! Every child is a droplet, and all together they form an ocean.



#### A seaside farewell

The penguin, the secretary and the pupils at the EscolAQUA are going to clean the beach. They find tins, bottles, plastic bags, cigarette ends...When they've been working for a while, one child protests: "Why are we picking up all this stuff, if we didn't throw it away in the first place?" "So that the grown-ups can follow our example!" replies Octavi the secretary, who, after all these lessons about water, is now very much aware of the problem.

The penguin asks the pupils to pick up handfuls of sand and to say what they find there:

"A conch shell!" a little girl yells.

"A scallop shell!" says a little boy.

"There are also white pellets and little pieces of plastic," says another.

The penguin explains:

"The pellets are called nurdles. They come from the material used to make - among other things single-use bottles which cargo ships get rid of in the high seas. These nurdles are bad for marine life, because the fish mistake them for food, and at the same time they spoil the environment. Just like the bits of plastic, which are the remains of packaging and other objects.

That morning, they work so hard that the beach ends up completely clean. At midday, a sailing boat appears on the horizon and the penguin gathers the group together to tell them that it's time to go home. That it's been a pleasure to meet them and that he's leaving in the hope that the EscolAQUA pupils will keep on loving water. Everybody gives farewell hugs to their new friend. "We'll write! We're going to miss you!" say the kids.

"I really enjoyed meeting you! See you soon!" cries the penguin as he climbs on board.

Wind fills the sails and the boat sets course for the south. Octavi the secretary waves goodbye as a tear rolls down his cheek.



### The EscolAQUA book

"The book is ready now and soon we'll have a party to celebrate!" says Joana Paraigües. "My hand still hurts from so much drawing," adds Armand.

"Did you invite everybody?" asks Joana.



"Yes!" answers Octavi the secretary. "The EscolAQUA pupils! The schoolteachers! The caretakers! The mothers and fathers! The grandparents! Even the parrot who appears in chapter four! But Joan, you're the writer, couldn't you make the penguin come back?" Octavi the secretary misses his friend. "Let's let him swim in peace for the time being. Our job now is to make sure he can do so in clean water."

The guests arrive, accompanied by friends and neighbours. Everybody joins in the fun. The kids read about their adventures in the book and relive their experiences. When they get to the end they celebrate with toasts of water from a cool fountain.

"What are we going to do when the party's over, Joana?" asks Octavi the secretary.

 $(\cdot)$ 

 $(\cdot)$ 

"The children have got plenty of ideas...we need to ask them and keep on listening to them," she replies.



#### Ideas, ideas, ideas...

The children are an endless source of clever ideas and at the end of this book they try to explain some of them: the ones which, when pretending to be writers and scientists, the EscolAQUA pupils told to the penguin and Octavi the secretary. Let's not forget that Jules Verne and Marie Curie were also children once, and later on astonished society with their inventions, which seemed like science fiction at the time. Thoughts are sparks which can light the fire of any truly great project.



Build an underwater vacuum cleaner to such up all the nurdles and microplastics. Consume local products and buy loose, unpackaged food. Put more drinking fountains on the streets and squares. Ask magicians to come up with some tricks to clean the sea. Write the sentence: 'Pedalling is clean and free' on all petrol stations. Earmark one day a week (Monday) as the World Environmental Volunteers' Day and go out and clean up the environment. Put a lid on wastepaper bins on windy days. Make a machine 'to unclone' packaging. Someone should shout out: 'Ive invented UNbottled water!' and when people go and have a look, that person should twin on a tap and drink from it. Put a timer on the shower so that if it uses up a lot of water, it will then release a jet of cold water. Every time we don't recycle, a plastic object that we have at home should disappear (to compensate). Look for water on other planets. Make a time machine so as to go back a few years and manage plastic better right from when it was first used. Make a button connected to the clouds so that it will rain when we need it to. Ban putting heavy plastic demijohns of water in the lift and make people have to carry them up the stairs. Down with packaged snacks! Long live puit! Make a magic potion that will make absolutely everybody fall in love with drops of water.

#### Many thanks!

EscolAQUA is a Corporative Social Responsibility project based on the transmission of information with the aim of promoting awareness and sustainable habits with regard to water consumption. We wish to generate activities in schools according to the needs of pupils, teachers and families.

We would like to thank the pupils, teachers, personnel and management of the following schools: Sant Pere i Sant Pau, Marcel·lí Domingo, Serrallo, Bonavista, Pax, Arquitecte Jujol, Sant Sebastià, la Canonja and Institut Escola l'Agulla as well as Karme González, Arnau Mundet, Montse Gaya Güell and all the people who work at Ematsa.





A refreshing book that promotes sustainable habits as regards water consumption, and in which, thanks to a penguin and a writer's secretary, we will discover everything that the EscolAQUA pupils are doing for the environment.

"An excellent book for learning to love water!", according to the author. "With schools, clouds, beaches...and brilliant characters!" adds the illustrator.









