

# Zarauz, a Birth of Life

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## Abstract

Colombia can count, among its many riches, with two oceans and several lakes and rivers that feed our vast country. Claustro Moderno is no stranger to this blessing. Having a water birth of its own, the school has been able to provide water not only to the people, plants and animals that coexist there, but also to deprived communities nearby. Nevertheless, unfavourable situations such as inequality, social problematics, and lack of strategy in the administration of environmental programs throughout the years have made our country's water conditions really vulnerable. Water management, control and treatment for consumption in our country is in alert.

It is imperative to propose strategies that promote solidarity and social development in order to implement viable solutions to overcome such situation. As students we want to start by our school, our Claustro Moderno community. We will work on the construction of an environmental education project based on monitoring and technical training for students, staff and parents in the school water use and treatment as well as in the production of natural and artificial filters. In addition, we will lead campaigns to encourage the community to take advantage of the many benefits brought by the water born in our school, and also to raise awareness on the terrible consequences of water misuse and waste.

## Keywords

Water, waste, filter, clean, awareness

## 1. Introduction

Colombia can count, among its many riches, with two oceans and several lakes and rivers that feed our vast country. Zarauz, the land where Claustro Moderno was built, is no stranger to this blessing. Having a water birth of its own, the school has been able to provide water not only to the people, plants and animals that coexist there, but also to deprived communities nearby. Nevertheless, unfavourable situations such as inequality, social problematics, and lack of strategy in the administration of environmental programs throughout the years have made our country's water conditions really vulnerable. Water management, control and treatment for consumption in our country is in alert.

We are really looking forward to make this real and to make people conscious about how important water is for our planet. This is a very important opportunity of us, this way we can spread the word about this constant problem we all are facing. It is also great that we can get to travel and know different cultures and learn about the way other countries are doing something to make this world better.

## 2. Content

### 2.1 Purpose

We will work on the construction of an environmental education project based on monitoring and technical training for students, staff and parents in the school water use and treatment as well as in the production of natural and artificial filters. In addition, we will lead campaigns to encourage the community to take advantage of the many benefits brought by the water born in our school, and also to raise awareness on the terrible consequences of water misuse and waste.

### 2.2 Methodology

The first thing that we started to do for our project, was doing a brainstorm of ideas about a social campaign to apply here in our school, Claustro Moderno. It is easier for us to know about water and have a connection with it, since our school has a big source of water that comes from the upper part of the mountain that makes part of our school, hence, it is one of its most important characteristics. We also focused all the work on the different stages of the children. Our school is not divided into primary and secondary school as most schools in the country. It has been divided in stages according to ages of developing. There are five stages that are called Etapas. We will be referring to them permanently.

With the orientation of our English teacher David Bonilla, we drew and created two characters to represent our campaign, their names are Claudio and Claudia, because of our school's name, Claustro, and they were created for motivating children to take care of water. Posters of them will be hung in strategic locations around their Etapas (stages), where they constantly see them, so they will have them on their minds. First of all, we thought about all the Etapas of the school, and we created something different and special according to their ages:

Starting with Etapas 0-1 (ages from 4 to 8); the main objective is to raise awareness about taking care of water, but making it more experimental, so they could learn by doing it with their own hands in order to get them motivated. We are going to take the children to the secret garden, a special place in Claustro to show them where the water of the lake that they see every day comes from, to show them the fountain and make a kind of "ritual" with them, where they promise to take care of water forever, teaching them that if they do not do it inside of the school

as well as at their homes, the world is going to run out of that natural resource.

For Etapa 2: (ages from 9 to 11) in this case we focused on consciousness through evidence because in this special stage sometimes they do not believe the actual situation of water in the world. So we are going to take them to the fountain as well, but this time, they will take some samples, and then we all go to the end of the river to take a final sample, and compare it to the first one, to prove them how water gets dirty if people do not take care of it, and how its quality changes, so they get more conscious about taking care of it.

Another thing that we are going to work with them will be the creation of songs in groups about water, and how to take care of it, and how important it is for the planet, not only for humans, but animals and plants, then present the songs in front of the class, to pick the best one and the most creative and accurate one, gets a price.

Etapas 3 and 4: (ages from 12 to 18) taking into account that it is harder to get to teenagers than to children, and that we are teenagers as well, we know exactly what they like, we are going to make lectures, using examples of the daily life such as taking long showers or taking too long brushing their teeth. We are going to make some surveys to have a better knowledge about how they take care of water in their daily life, especially at home, and how they could improve to encourage water saving.

On the other hand, we also made an interview to one of our biology teachers, Nelson Borraez, because he knows a lot about Claustro's history, in the 9 minutes interview he told us about the origin of water in Claustro, how it is taken care of, and a little bit of history about it.

We also went with him on a hike to our school ecological path (mountain path) in order to know the process, so we went to the upper place in our school to see how water is born in the mountains and how it is filtered among the rocks, to know better the tour that water do. We documented everything with a go-pro, and we will show it in Vught.

Finally, we asked one of our coordinators to give us some information about the way our school takes care of the water, since he has been working at Claustro Moderno for years, he knows some things about it.

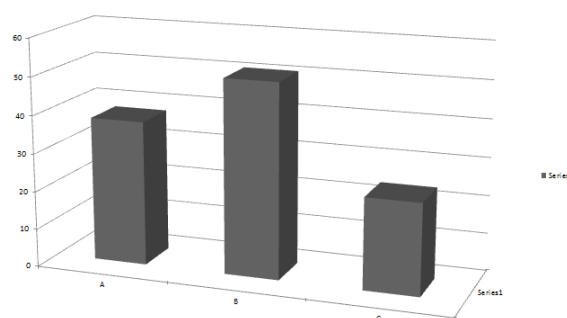
We asked him about the way the school waters the plants and how they re-use this big amount of water they spend around the school and he told us that it is a system that goes all around the school. Before Claustro Moderno was a school, it was a farm, so he told us that people used to come here and wash their clothes by the lake or just get some water to cook.

### 3.Campaign

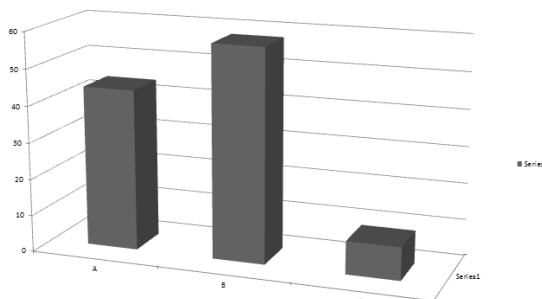
We started the campaign by applying a 10 question survey in Etapas 3 and 4 (ages from 12 to 18), to determine which the objective would be, and to consider how to develop the

campaign. And we reached a conclusion: students from Claustro Moderno are concerned about water pollution, however, there are several aspects that must be covered. One of them, is that even though plastic bottles are usually reused, we would like to promote using sports bottles rather than buying new water bottles every time we want to drink water. The survey also helped us to realize that half of the students from Etapa 3 and 4 answered that they closed the faucet while washing their teeth or applying shampoo during the bath, but the other half answered that they usually forgot about it or never did it. And finally, we concluded that students draw people's attention when they see someone else wasting water and worry about what others do, but they do not take enough care of water themselves.

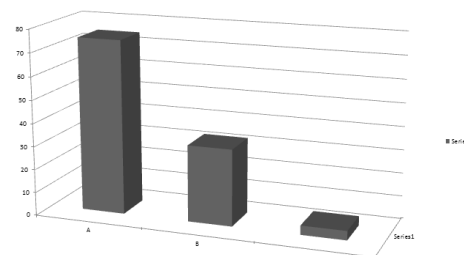
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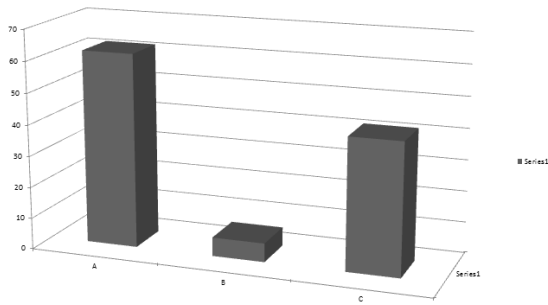
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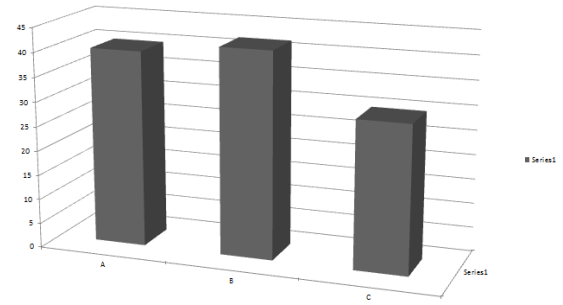
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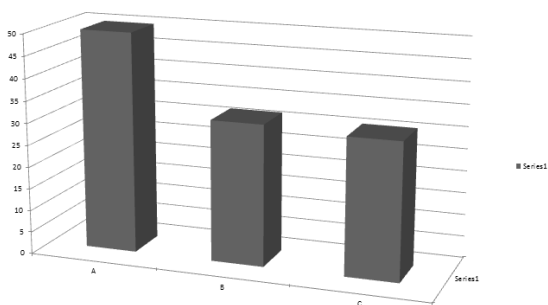
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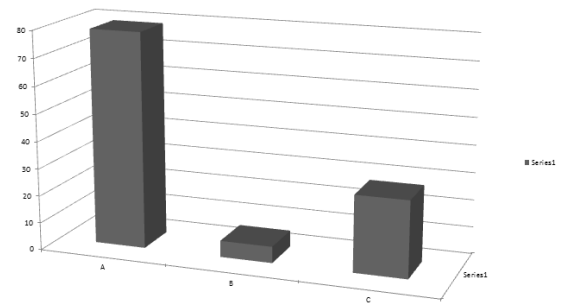
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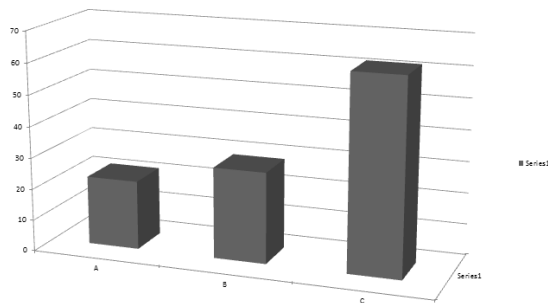
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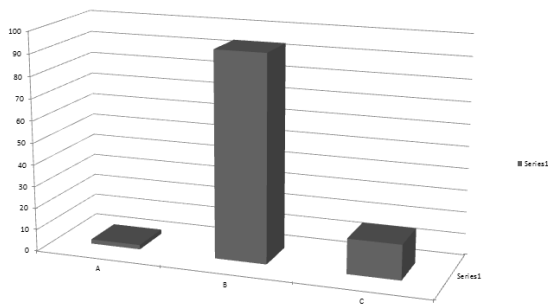
Question 9:



Question 6:



Question 7:



We made an interview to Nelson Borraez, who, besides being our biology teacher, knows a lot about Claustro's history, so he is the right person to ask about water in our school and its origins, history and other related questions. Here is what we asked:

- Tell us about the origin of water here in Claustro Moderno
- Has water quality changed in something about before?
- How do we take care of water in Claustro?
- Has it been shown that the amount of water flowing down the spring has decreased?
- What happens to the water once it leaves the school?
- ¿Has any company tried to buy Zaraúz (Claustro Moderno) because of the spring?
- How was the spring on the farm discovered?

Has Claustro Moderno been working to prevent any droughts?

He told us very useful information about Claustro Moderno and water; for example, he told us that water in Claustro is born in Chingaza's wasteland, and filters through the rocks; Claustro is part of the wasteland, then, the filtered water divides into 18 different springs, he also told us that the Health Ministry has done tests of water in our school every year and says that it is completely pure, even more than bottled water. Claustro's water is 100% pure, the school does not make any procedure with chemicals, instead, we take care of water leaving it natural and avoiding dirtying it, the best way to preserve water is educating the youngest from the beginning so they will grow up conscious about the importance of clean water.

Another thing he mentioned was that the amount of water has decreased since 8 months ago, due to the severe drought that hit Colombia from January to March. The wasteland dried out as did the water in our school. Water that leaves school goes to *La Salle University*, where they filter and clean it and after that, it is used for multiple tasks. The remaining water finally goes to a creek. Nelson confirmed that there has not been any companies trying to buy Zarauz because of the water, but there have been those wanting to make it a quarry for exploitation. Finally, he also told us that the spring is older than Zarauz, the former owner decided to encircle it to collect the falling water, then the Medellín family made the lake in the school.

For our investigation we also went on a hike to the ecological path, it is a path in one of the many mountains surrounding us, where parents, students and more go hiking in "Expociencia," a very important annual event where all students of all ages and grades create a project about something, usually something related with physics, chemistry or biology. In that event the ecological path opens so every person that wants to get a guided tour learning about the history behind it and other interesting things and also being in contact with nature is able to do so.



Figure 1: Entrance to ecological path.

We went up there again with our teacher Nelson Borraez, we went to the upper place of the mountain where water is born, to learn more about water in our school, through the whole walk Nelson taught us about plant species, the journey that makes water and also about the history of the area, for example, he told us that an ancient tribe was in the eco-trail, settled there and left some traces, a grave and cave art on the rocks, also told us about the species of animals that are up there as flying foxes, bats and more.

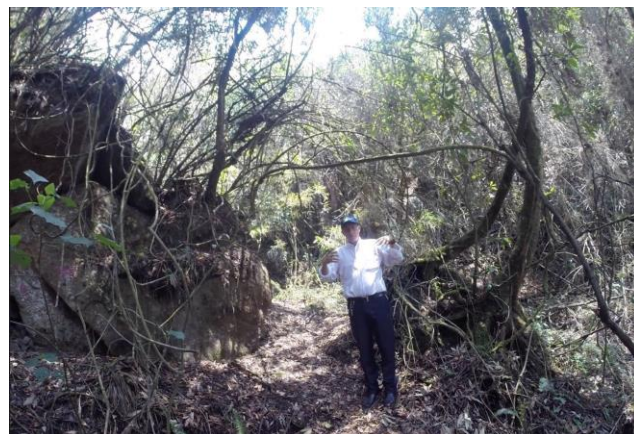


Figure 2: Our teacher Nelson Borraez.

We finally got to the highest and the most important place of the whole walk, where school's water is born, the so-called bat cave, there we learn very interesting information about the relationship and truce between the rock and the tree, because as you can see in photos and videos there is a curious situation, in the gigantic rocks exceed some roots which is pretty strange, Nelson said that that happens because the tree and the rock decide to help each other and create a truce mutual aid.



Figure 3: The bats cave.

What also astonished us is that just from a single drop of water that is born such great flow and lake can be created; it cannot be seen in the video, but the water goes below us.





Figure 4: The main water birth of our school.

The climb to the ecological path was quite rewarding for us and for the realization of our project, not to mention we learned a lot, not only about the route and the source of water, but also on other issues related to the nature and history, we enjoyed being in contact with nature while learning, that is all about, learning a lot while we enjoyed it a lot.



Figure 5: Maria Jose, Maria Alejandra and Maria Fernanda in the bats cave.

What we are going to do in our campaign will be to design appropriate posters and paste them all around the school: in bathrooms, the lake, classrooms, and hallways, and they will remain posted for the rest of the year, so that students see them very often, and start being more conscious about

how they use water in their daily life, to make a habit. The posters will give advice about several ways to take care of water in a didactic way with our characters Claudio and Claudia, focusing on the weaknesses that were mentioned before. We are going to encourage that we have to start with 5 ourselves, and not focusing on other's mistakes to make a significant change.

## 4. Conclusion

In conclusion, we do not want this campaign to be exclusive for the symposium. Our purpose is to create a habit in our school Claustro, in every student and in every member at their homes, so there will be a community that is conscious about taking care of water and life in general. We have really big expectations with this project, and the goal is to create a tradition in Claustro, and set an example to other schools in Colombia and also the world. We want to teach more people how to raise awareness about the importance of water, that is our main purpose with all this experience in the symposium, we want to leave an important mark in our environment that stays in our communities permanently. Hence, we expect our results to be shown in a short, medium and long term. We started our campaign based on the surveys and the short term results are helping us to find solutions. Results were almost what we expected them to be, they were positive in general so they gave us strong bases to start developing our project. Medium terms results are going to be shown in the conferences at the Symposium, and long term results are those that we hope will make the real impact so that a real change, one that leaves evidence of improving, can be shared with the world.

## Acknowledgments

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Carlos Villacorta, stage 4 Coordinator and Economist.

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