

Annex 1. Fieldwork Diary

1 - Tuesday, April 2nd 10h30 Escola Básica do Lumiar : preparatory meeting

PM,

K, P

HM

At 10h30, the agreed meeting time, PM, P and me wait in front of the main entrance to be let in. At 10h35, HM (the school's principal teacher and director) lets us in and leads us through the nicely decorated hall to her office on the ground floor. She lets us take a seat, she's very smiling and friendly. This is her space, but she warmly welcomes us here. P and I do not introduce ourselves as observers, so the principal must think that we are part of the APRH team.

Once the principal sat down herself on her side of the neatly arranged desk, PM starts to explain the project and frame it. Both women have their notebooks in front of them, at reach, but closed. The principal is very attentive, she searches eye contact with PM who speaks very freely until she asks her where in the school APRH could organise the presentation of their project ? Before responding, the principal takes a breath to think about it; either the library or the gym will be good. She remarks that we shall not forget that they have more than 400 pupils, ranging from the age of three to ten, and that it will be difficult to show it to all of them at once, even concerning their concentration. PM reassures her that she thought of that, especially because the program includes a demonstration of the installation of the pressure devices, so both the presentations and the observation shall be made in groups. They agree on that and look at P and me to make sure it suits us, also. P responds that this is a good idea, and then the HM asks her if she's from Brazil ? They joke about Brazilian habits.

PM is the one who tears the attention back to the project : She suggests an interactive part for the activity day: a common drawing about the water issue, done with chalk to avoid that children colour themselves and the entire school as this will not be an art class situation but much more chaotic. All three portuguese speaking women agree that the chalk is a good idea compared to regular paint. They decide on having two or three pictures of 1m² each to keep the action and purpose in the children's mind and give some visibility to the water issue.

At 10h40 the principal grabs another sheet of paper (the back page of a print) to schedule the intervention. Even though PM insists on the need of a washroom closeby to the presentation room, the principal decides everything, PM only confirms, so does P when the principal looks at her. They schedule 20 to 30 minutes per group, with very short intersections. The principal seems not concerned about these little time spans, she is very positive about this optimistic planning.

They also agree on choosing one or two children out of every class to go and watch T at work when installing the devices. This child will then report to his or her fellow pupils.

10h46 They agree on April, 29th 9h00-12h00 for the intervention. The HM suggests that and PM confirms.

10h47 PM asks how she can best approach the kids. She tells the HM about the already made powerpoint presentation and that she adapted it for children, PM is very confident, convincing, since at ease. The HM confirms, she lets PM do her part.

10h50 The HM, visibly proud of her school gives us a tour. She shows us the results of other projects : a vegetable garden in a patio, art projects about waste in the sea, etc. This school teaches children sustainability and responsibility through common activities.

Before leaving at 11h00, PM explains again that Ech2o would fit nicely into this school's concept and she asks for permission to bring info material on the 29th. HM agrees and gives permission.

The communicational level between the two women is a back and forth two-way system. They agree on a common project that merges their two different fields of expertise. For PM it's the ECH2o project, for the principal her familiar environment and responsibility.

CONTACT 01**When:** 04/02/2019**Where:** Basic School of Lumiar (Alto da Faia)**Participants****APRH:** PM (Secretariat)**School:** Headmaster HM (Establishment Coordinator)**ISEG:** K (Master student), P (Master student)**Historic:**

- At 10:30 a.m. were at the entrance of the school: PM, Kerima and Patricia
- There is no janitor or auxiliary at the entrance and therefore, we waited for about 10 minutes until the Coordinator arrives to happily welcome us, after we had rung the doorbell.
- The ambience of the central courtyard was broad, bright and very quiet.
- PM introduced us to the Coordinator HM, who soon led us to her office. As we entered, she provided chairs for all of us. The office was also well organized, had many papers and posters, and drawings made by students.
- As we sat down, the meeting quickly began. P and K were taking notes, while PM and HM were talking.
- PM explained that our visit would be brief and that the objective was to discuss the best way to make the presentations. PM said that there was an animated PPT for this and, in agreement with the Coordinator's opinion, it was defined that the presentations would last 20 minutes.
- HM asked what time the presentations would be and PM replied that the Association would be available for what was best for the institution. In several moments during the conversations, PM emphasized during some of the Coordinator's questions: "Whatever is better for you".
- After the definition about the time for presentations, they set out to define how the students would better be organized and where would be the best place to do it. HM argued that doing it with all students at once would be complicated due to the difficulty of movement and control, advising to not do in the classrooms or in the gymnasium. It was decided to gather the students in groups to participate in session in the library.
- PM explained that in addition to the presentation itself, one of the activities also planned was a dynamic of drawing on canvas, to feature the event. She suggested possibilities of 1 to 3 canvas, with groups that the Coordinator indicated.
- PM also explained that instead of using ink, which usually is very messy, their proposal was to use a type of crayons. At that moment, she showed everyone at eye level the crayon that would be used and the canvas. It seemed at that moment that she wanted to show concern to do not create turmoil because of the play with ink. HM was agree with that and laughed as well, confirming that children really make

a lot of mess using ink. At that moment, she also looks back at me, expressing that this really happens and that there is a general recognition about it. I also laughed and agreed that the play with ink can get things a little out of control when many children are involved.

- PM and HM then return to the definition of how to do it, and due to the size of the canvas, the space of occupation and the time, the Coordinator decided for the participation of one student per class.

- PM presented the last activity planned in the agenda, explaining how the installation of the devices in the school's taps will be, that will be made by the APRH's Technician T, finalizing the scope of the project. HM concluded that the monitoring of the installation by a student of each class would be ideal to not consume more time with logistics.

- HM then took the initiative to pick up a sheet and make the students' scales and based on the time defined for each activity, class intervals and the lunch time, was building the schedule beginning at 9:00 am. The PPT sessions would continue until 10:30 am, with installation and drawing as follow activities and closure scheduled at 12:00 pm.

- During this part of the conversation, while HM wrote the schedule, I believe that because she saw me writing continuously, she addressed me saying that it was not necessary to write down schedules and groups because what she was doing "just an essay, a first essay". At that moment, she also asks me kindly about things from Brazil and how she likes Minas Gerais's cheese. We laughed briefly until she closed the all the program.

- With the schedule defined, PM confirms the agenda for April 29th, thanks HM for receiving us and clearly say that she will send the PPT and other material previously for appreciation by the Coordination.

- When we get up, HM does not lead us to the exit, but rather, for a tour at the school, which was not expected by us. With great satisfaction, the Coordinator presented us the garden, community garden, rooms, refectory, gymnasium, highlighting her concern with quality of the environment and other projects implemented. She was proud of what had already been done, of the actions taken by the school and students.

- As we returned to the central courtyard, PM and HM addressed issues related to the right of image to take photos and videos on the day of the event. It had not been discussed in the office, but they remembered it as something important to look after in advance.

- At last we were led to the entrance to say goodbye. HM thanked us, just as PM, K and P thanked the Coordinator. The atmosphere was very nice.

2 - Wednesday, April 10th, 10h30 am first session in Centro de Convergência de Telheiras (CCT)

PM, D,

K, L, M-E,

CC, staff members, participants : retired people

10:20 we arrive, the area is very neat and quiet. The houses here are big and most seem to be inhabited by one family. We conclude that Telheiras is a rather wealthy neighborhood.

Later, a Portuguese person explains to us that Telheiras is where Lisbon's educated middle class lives traditionally. People here are or were professionally involved in education or other public services.

This gives us a hint concerning the retired people's background.

10:22 We meet T outside and introduce him to our research group. He hurries inside to see if the APRH team has already arrived. They have, so PM calls us inside.

10:25 We enter the room where PM is about to install the material. Three elderly people are already in the room, which is rather cozy with sofas and cushioned seats, all turned in the direction of the wall where PM will present her projection. A bird is in a cage in one corner of the room which is furnished with bookshelves, two computers where the three elderly persons play solitaire, a kitchenette and gymnastics instruments. The room is rather dark since the windows are shut, and covered by curtains. PM is ready, her first image with the APRH and ECH2O Água logo is already projected on the wall. PM asks us to help her with the preparations of the PR bags (bag with logo, bottle with logo, info material : UNO-styled flyer).

She introduces us to a gentleman interested in who we are. He tells us about his travels to Brazil, and wants to share his experiences. It is not clear if he works in the center or not.





10:35 D arrives talking to the lady who runs the place (CC). We will be belated for around 15 minutes, the director kindly apologizes, addressing herself to PM who is waiting all set.

However, there are already -5 staff members

-23 participants

-1 young staff notes who attends the meeting, while

PM is mostly waiting, fixing her attention on the computer and concentrating on her presentation, while D is organizing the room together with the center's staff. The retired people chat among themselves, only some look at the screen, most don't seem to recognize the projected picture.

T leaves the room to have a look at the bathroom where he is supposed to do the demonstration. Our research team dispatched inside the room in order to have different perspectives and enlarge our viewpoints to catch as many impressions as possible.

One handicapped lady wants to sit, too, but cannot find a chair. She stays standing, loses focus quickly : she looks around at the other participants and does never speak up.

10:47 the director and the APRH-team discuss and joke around a little bit. She asks if T will really install the device in all bathrooms. PM says that yes of course he will, but it's quick. Lady quite relaxed, she has an eye on her group. The participants try to sit close to their friends, they gather in groups of 2 to 5, some talk, others just watch what is happening. The room is filling up and when they come in, some watch me and the research team, too.

10:49 the director and AD welcome everyone and introduce the session. One other sir arrives, he apologizes for being late because of his walking stick, he's of good humor and joking about not being so fast anymore. He looks quite friendly and fun but some of his fellow center guests seem not very amused about him being late. This Might happen often.

During this introduction, PM starts taking pictures of the participants. They're happy to get attention. Some ask for a picture with D, she reassured them to take these later.

10:52 another man arrives, led in by a lady. He's agitated, excited when he takes a seat. Some elderly girls giggle at his sight

10:53 PM and D go in front to start explaining. Their tone is very easy and friendly, they're smiling and ask if everybody sees well ?

D talks freely, addresses to everyone, searches very quick eye contact with many participants. Some make agreeing gestures. Others just look at her or the projected image.

The center's staff is concentrated in D's talk. PM is just standing next to her, without any visible reaction to what D is explaining, until she finishes her speech with a question to which some participants react verbally. Then D thanks everyone for being here and gets off to manage the presentation.

10:57. PM takes over with the presentation. D interrupts her by asking for PM's phone, as she wants to take pictures. PM gives it to her, but the elderly seem disrupted, so PM refers a lot to her PowerPoint, so as to catch back their attention with the visuals proposed.

The Lady who runs the place was concentrating on taking notes while D spoke. Probably concerning her participants. She then carefully watches PM's speech.

10:59 another lady arriving accompanied by one staff member.

Some staff sat down, watch ppp while others seem to watch their people.

11:00 D completes what PM is saying, her intervention cuts PM's talk. Three other people arrive.

PM Plays a video that shows how the planned on sac measurements and pressure devices work. There is music playing in video comparing the water use before and after installation. Same time : half the water. Some seem surprised and look at their neighbor to say OH ! Their reaction stays among themselves, they do not directly address to PM.

11:02 PM and D ask for reactions to the video. Both of them stand in front. This creates a schoolish teaching situation : the experts tell students about their field of knowledge.

Lady who runs it explains again to one elderly lady who looked confused. She did not ask verbally but only turn to the director and look at her. She probably might not have asked the strangers if APRH for further explanations even though she's interested in the subject and willing to understand.

—> how to overcome this communicational barrier of missing trust ??

Cleaning staff also present (3 ladies) they watch very attentively.

11:04 another video about bad and good habits concerning domestic water use : washing the dishes, laundry machine, etc. Now PM talks while the video is playing and shows what happens. The director stops PM, asks her questions about the processes. People are concentrated and focus on PM.

11:06 one staff member gets up to lower the music. He has seen that some of the participants do not understand what PM and D are telling. The music distracts their attention and makes hearing difficult.

11:07 more good and bad habits on the screen : do not flush down waste. Sir talks. D takes over. Everyone seems to agree.

Bird singing in the corner.

Some only watch the screen. Never the person who's talking.

One cleaning lady leaves.

11:09. Same sir shows he has no hair to flush down the toilet. Some laugh. This group of participants is very familiar among themselves.

Subject : medication. PM explains, people listen carefully same. Sir says something. D goes in front, completes again. Sensibilisation about spread of substances into water. Same sir reacts.

Little conversation emerges between four ladies in the corner. This concerns them.

11:11 everybody still watches. PM talks about food. Heating it, throwing bad food away.
CC explains to the same old lady again.

Walking stick sir is intrigued by my presence. Watches me regularly.

11:13. CC talks about microphones with D. Not everybody could listen ? D continues her explanation.

11:14 CC talks to another staff lady. Four of them gather, watch, go on discussing a bit while PM goes on with the presentation. Noise level now relatively high. Retired people distracted.

D comes in front asks who wants to see how the advice gets installed, if are there questions, comments?
One out of the four chatting ladies has sth to say. Talk about waste being flushed down the toilet.

Slide : device will be installed now in all bathrooms. T shows, comes in front, gets applause. People are happy to see the young man.

He explains what he does/did. Some watch each other, surprised, impressed, excited.

One lady asks if he comes into her home ? The group laughs. They're more excited about T being there than they're interested in the device.

CC comes in front, too, she organizes the discussion. Most smile now, are interested by what happens.

11:20 D : now we go: CC delegates who can come or not, many interested. D suggests to have several teams. CC notes those down.

PM concerned about the kits. D shows the bags, both explains why the bottle is inside : spare plastic.

ME leaves with T : what happens ?

Staff organizes groups to watch, be témoins of the installation two ladies leave at first, CC and sir who first talked to us accompany them.

Two staff members take over, follow with two other ladies who haven't even shown much interest.

PM follows them, she is the organizational link !!

11:23 D explains the brochure, facts and figures. People respond by nodding their heads, some get ready to Leave for the next group.

11:25 one lady asks a question to D. She starts speaking about water scarcity and conflictuality. Some comment to their neighbor.

Once the visual has turned off, people concentrate more on the speaking person, turn heads when someone else speaks.

D jokes about people not drinking enough, so there is no waste right? Some turn to joke about that with a friend.

11:27 one sir gets up and leaves, on his way out he bise a friend. Another lady in a wheelchair follows and another one as well, she even takes out her chair

D keeps in explaining : food contains water. She kept the ECH2O-Água bag in her hand, showing it.

11:30 quite a few don't pay attention any more.

Outside : discussions, they distract the ones sitting in the backrows.

Staff come back to take out the second group.

—> my proposal: organize these groups during the preparatory meeting with the CC.

Those who can leave are excited, happy, smiling. Others ask if they can come, too, with their friend.

Other suggestion : Print every page of the brochure in big to show it easily, have panels that are exactly the same as the brochure.

No longer very concentrated because of the noise outside.

One lady wants to exchange with a very young girl of the staff. Only 15 participants left. More comments now. They joke. One woman fell asleep.

CC comments a lot to another staff member but also to the entire group. Everyone knows the group.

11:33 D asks for reactions of the public. Talks easily about her subject. Forgets about eye contact with those not directly in front of her. They are more likely to skip attention.

Question from a staff member. CC takes over explaining, D listens carefully. Then completes.

11:35 First group starts coming back.

Discussion goes on. D talks about participating institutions and their role as experimental communities. Diversity is important to make a change.

Third group is called to leave. One lady argues she wants to stay and listen. Okay then, everyone can chose. Does someone else want to go? Most get ready to leave, only two seem very unconcerned, they look tired ? Two others stay seated. Most seem Happy.

Cleaning ladies come back, too.

11:38. Two ladies ask for the bag, they were intrigued by seeing it when D talked. We will give them out later, outside. Mhm okay then, they're not happy but accept the answer.

The official part is now definitely over : People join their friends, talk about the subject, joke mostly about spending time with T.

One old lady goes to ask D questions.

Some begin tidying up.

Staff still organizes the last groups to go and see the installation.

D thanks the interested lady, valorises her interest. Then, smiling, she goes to ask another one if she liked it, and how she feels about water.

11:43 those who seemed unconcerned were just waiting. Ask D now when it's their turn.

L talks to one lady who's still waiting : she testifies that she has always been saving throughout her entire life. The presentation was interesting to her, but not new.

11:45 I follow PM with the kits to the bathroom. Here T demonstrates the bag measurement and explains, answers questions. PM distributes the bags. Cleaning lady tells they really like it 'retorno positivo'.

Senhores want to test the bottle. Take it out, fill it up. Oh yes it takes longer to fill it, they want to see the device. T takes it out and puts it in again. Ladies complain it takes long. Staff explains more about water.



T asks everyone if they are doing fine ? All tell they are, they liked the presentation. It seems that they enjoy talking to him a lot, listen him out, are focused.

One lady asks PM for another bag, she'd like to give it to her daughter.

Cleaning ladies stay around and help the participants move around to see well or get out of the washroom.

Atmosphere is happy, smiling. But the retired seem to be more interested in having young people around than in the demonstration or water issue itself. But, it catches their attention and might help them remember the suggestions when they think of the event.

As we have enough time, they test the water flow themselves one by one and tell T how surprised they are about the remaining comfort.

11:53 some gathered in the hall, sat down on the sofas and discuss next to the flag, pointing on it.

First staff sir talks to D, other staff members join. Then they leave to the washroom and try the device. In the meantime, the room was all tidied up. Last elderly lady in the room discusses with one staff member. They decide to go for lunch.

PM talks to CC about how they can spread the message, thus PM hands her informational material. A big poster and leaflets. CC confirms to distribute them in the neighbourhood. She is as interested in the topic as the executive team.

12:00 T finishes. Comes back to the room.

D and PM thank the staff member who first talked to us and showed interest in Brasil. He says thank you, too. Both, D and PM, gather their things and we get ready to leave.

12:00 CC comes back to the room. D talks to her about presenting the project to the câmara municipal : Telheiras should be presented as an example for other neighborhoods. It already has a good, eco-conscious reputation. Communicating about ECH2O will help both to gain visibility and merge networks. CC suggests to inform about the project on the Telheiras Neighbourhood festival ? **D, always very busy doesn't agree right away, she needs to check if she's available, but likes the idea.**

12:05 D wants to take a picture with everyone. Introduces me to CC, explains what I'm doing. Until 12:15 taking photos with CC and one lady. Another one wants a photo, too. *Bom trabalho !!* **The retired are evidently happy to have participated in the event.**



T is still installing devices.

One elder man stays until we leave.

12:20 we wait for T. D explains the devices are special since they are certified. The company only sells big amounts. It's AllAqua, Portuguese, located in Lisbon. Not partner of APRH but of ANQIP, a certifying association who linked them up.

12:25 T finishes soon. CC is a friend of D.

3 - Wednesday, 04/10/2019 Centro Comunitario de Telheiras

Organisation of this protocole : ME – black L – Green

Present : PM, D, T, our team ME, L, K

Center Coordinator (CC) and several staff members, participants

Arrival:

-The place seems a little dark and hidden. The presentation room is simple with some chairs and sofas organized.

-We met PM. She is very nice and joyful.

Our team waited in front of the retirement home for a few minutes discussing how we will organize our observation. We then met T, who talked a bit about where we came from and then headed inside de home. Waiting a little bit more, PM met us outside and let us in.

The house itself seems from the 60ies, doesn't have many windows. The presentation room was all dark, the 2 main windows had the blind closed, only artificial light was on. There was a yellow canary chirping close to the lateral window.

First contact:

-Before the presentation there were some people seated at the room and others were at the table starting to organize the project kits.

A man staff from the house started having a small talk with us, asked about our nationality and Brazil. The centre's coordinator (CC) asked right away our help to make kits, bag, water bottle and leaflet. The man kept talking and tried to help with the kits. The director of APRH (D) in the meantime introduced herself. We met from far a house staff wearing a black shirt.

-We introduced ourselves to some of the people and an old man offered to help with the kits. He was very nice and talkative and asked us where we were from and what we were doing there.

-Most of the people are elderly/ women.

-They seem to know each other very well because they are talking with intimacy. They are expressing many smiles during the conversations about their eye problems and the high prices at the drug store.

-PM asks them to take some pictures. They like the idea and make some jokes about how good they will look in the pictures.

-There are a couple of other girls taking notes beside us.

Presentation:

10:42 elders start coming to the room, around 20-23 elders there

10:50 ech2o personnel pictures

10:53 D starts the presentation. She has to speak louder because CC says they can't hear well. A man says he hears well enough.

-The elderlies complain about not been able to hear it properly.

-The woman doing the presentation explains the process of saving water using the device and tell them that they are an experimental unit. They say that the technician (T) is going to install them today and that they should speak with their friends and family about saving water.

D is very incisive about saving water, that the center is on experimentation and that it should cause commotion outside the center, with their families and friends as well.

10:56 PM starts her part of the presentation. She tells who are the ones involved in the ech2o project and expects the learnings to be passed to outside stakeholders. She explains about the dispositive, filters for sinks, shower and an air balloon inside the toilet dispenser.

-The audience seems to be paying attention and is very quiet.

She then makes a question meant for everyone to ask themselves after the project “Do you feel the same comfort with the filter as you felt before?” Elders make small talk about that, there is a Talkative Lady that nods, showing importance with “the” question.

-There is a video explaining how the device works. They get very surprised with the results and want to know where they can buy it. The elders start talking with themselves with interest. There is a lady saying she wants the filter in her house. Another one said “What a difference!!” (when they say the economy from 12l/min to 4,8l/min). They seemed pleased with the economy.

-Good practices are presented and they pay attention to everything. **With the exception of two ladies sleeping with their chins on their chests. The elders have many doubts, around 5 of them want to know where to buy the filters. A lady said she has been putting water bottles inside the toilet dispenser for years to save water.**

Video 2 starts, it's about bad habits that wastes water. There is a commentary about if there are **smart washing machines that saves water (PM said that washing machines should only be used when super full). Another lady said that she has a smart machine at home.**

Elders show a lot of interest during the entire presentation. They comment along the presentation. Besides the lady in the front row sleeping.

Presentation goes on about what not to flush in the toilet. **D adds infos to PM's explanation.**

Someone asks again if everyone is listening. PM and D repeat themselves that they will answer to any question and will show the presentation again when they come back to check the metrics on water (in 2 months). They want to be sure of the adherence of the elders. **The audience complains once again that they are having trouble hearing and ask for a microphone.**

PM and D asks the public others examples of trash that should not be put on toilet “Tampons!!” Talkative Lady answers.

The moment to see the dispositive starts. Staff will divide the elders in group for them to see.

They ask for T to be introduced and are very happy, clapping when he appears. A lady asks if he can go home with her, the Talkative Lady. They clap and laugh as soon as he is in the room.

-Some people easily offer themselves to help T with the project when asked. PM or D asks “Who is part of team TECHNICIAN ?” Many raise hands... **A group of five volunteers to wear the ech2o shirt and go see the bathroom (and take pictures).**

The kit is showed to everyone. The wheelchair elder shows proudly his own bottle of water that he takes with him.

They start making groups to check the dispositive. The windows from the room are finally open.

PM leaves and D stays explaining other information (making room while not everyone is able to see the device).

Device demonstration:

-T asks me to help him with the chronometer at the demonstrations.

-First group:

10sec of water before the device: 11L

10sec of water after the device: 4L

It is an 8 persons group and they look **very curious and want to see every detail. They love the results and want to buy the device for their homes.**

-Second group:

T shows the device inside of the toilet.

The ladies who live at the second floor **ask if they're not going to lose water pressure.**

-Third group:

They are **very curious and full of smiles.** They ask if the device is hard to install, but after T doing it **they say that they could easily do that themselves.** They put their hands under the water and **agree the pressure is fine and that they won't lose comfort.**

-Fourth group:

They pass the device hand in hand and say it **seems pretty simple. They want to know where to buy it.** They say that you can save some money putting a bottle in the toilet rather than the toilet device.

-Fifth group:

Joking, a 95 years old lady asks T to be quick because she is in a hurry. **She says the demonstration wastes water and agrees with him that it's for a good cause.**

The rest of the presentation while the device was being shown

The presentation went on about **being healthy drinking a lot of water** "Oh but I eat (jello)"

Other comments made during the rest of the presentation and **how humankind is not using well water:**

"African continent doesn't have (water)"

"That will be the next war (because the lack of water)"

"Mozambique" by CC, about bad issues happening to global warming and water issues

"In Rio de Janeiro" side talk between two elders about what happened with the flooding

"Oh if I drank 1l of water.... I don't!"

There is a little dispersion, 3 elders leave. **Too much talk outside the room.**

D keeps trying to entertain the people left in the room. There is a certain anxiety to see the device.

2 ladies, talkative and another one, **still interested in buying the filters.**

Overall, active elders were few, about 5 people... Many listened carefully, very little showed no attention.

After the presentation ended, I went to the back of the room and tried to interview a lady interested in my cultural background :

I asked her what she thought about the project: **She says it is very interesting, she throws the trash correctly at home (plastic, glass...), she sends old medicines to the pharmacy...** There was an interruption, where a staff gave her walker... but then she got back to our chat right away... **She separates the oil used in cooking in a bottle, sends it to Pingo Doce. She added she takes her own shopping bag to the market,** but she doesn't like the plastic bags available in the fruits and vegetable area, because it pollutes. **She has three filter devices and decided not to see the ones at the retirement home.** Her grandson takes a long time showering and she usually knocks on the bathroom door so he can be quicker. **She then received her kit, started checking it with me, asked what the box was (the water bottle) and then started reading the brochure, saying once more about the importance of saving water and thought the information were helpful.**

4 - Friday, April 12th, 2:30pm first session at Laboratório Nacional de Engenharia Civil - Departamento de Hidráulica e Ambiente

PM, AD, T, other APRH members,

K,

DNA colleagues, children of APL DNA-LNEC

This is the department APRH is affiliated to within the university of Lisbon.

14:43 For logistical reasons I arrive late, the session has already started. The project's flag is installed in front of the building, the big poster in the entry hall where the event takes place.



There are people (29 adults, 3 teenagers and 10 kids probably under 10 years old) standing in the entry area and staircase. Nobody is seated, there is **some movement in the hall which creates a rather agitated atmosphere.**

PM shows her PowerPointPresentation with the educational videos on a **small computer screen** situated in the left hand corner of the entry hall, opposite to the staircase, to her audience the left hand corner showing the video to the kids. Some adults in the back talk between them and don't seem to pay attention to the demonstration. The kids are concentrated and only partly get distracted by what happens behind them. They **respond to PM's questions concerning right and wrong domestic water use habits** shown in the video. Their teacher, facing them, watches them carefully.

14:47 Every arriving person asks the sir who holds the automatic door open what is happening. Some of them stay and watch, others pass through the crowd to go on with what they are up to. They have their offices in the building.

The kids are asked to sit down while they still **exchange about sustainable water use habits.** Not only PM but also their teacher intervenes and interrogates them, guide the conversation.

The atmosphere is now more relaxed, all adults can now see the screen, PM and the teacher. Everybody laughs depending on the kid's answers to their questions. **The kids are already familiar with how to save water in their daily life and report about it. The adults join, free exchanges between everyone**

emerge. They must know each other relatively well judging from the ease with which they communicate.

15:50 **D sits down next to the kids, the teacher also.** PM continues showing the PPP, which T is watching also. **He has his material (the device and pliers) in his hands.**

15:54 D gets up explains the advantages of a metal bottle while PM and another woman distribute the kits with the bottle and leaflets to the kids. The adults get it also. **Most people take out the bottle first, comment on how pretty it is. Only three have a look at the flyers, only one really reads it immediately.**

14:56 The power point presentation is over. Two teenagers and one adult leave the hall and go outside. The teacher quickly speaks to T, they discuss who will go to the kitchen first to be a witness of his water flow measurement before and after the installation of the device. Finally, **the entire group of children follows T to the kitchen.** They all gather around the sink. A colleague of T helps him with the timing of his measurements.



15:00 As can be seen in the pictures, the department's kitchen is quite small for the demonstration to so many kids. The **space is not adapted** to this kind of demonstration. Those behind the table don't see anything but the other children's backs. Thus, **the atmosphere is rather noisy**, as people constantly exchange about the demonstration. **Once T explains how the measurement with the bags works, everybody stops talking and listens.**



15:02 Then he measures one first time with the regular tap, installs the device and shows the difference to the kids and measures again with the help of the sac.

While this is happening **PM walks around the room and takes pictures with the clicking sound of her phone on which distracts some children from watching.**

Concerning T's explanation, **the children seem not to understand the transfer from the 3 seconds measurement they witness and the amount of water flowing per minute of which T is talking. They don't react much. Only when he shows them the result of less water flowing within three seconds, they confirm cheerfully.**

15:04 **Directly after that, the group is asked to leave the kitchen,** there is no time for further questions. The adults stay in the back, what makes the flow of children difficult. **They discuss with one another what they just saw** and walk out to the corridor only very slowly while the next group, only composed of researchers of the institution tries to come inside. Outside, the kids have a look at the kits, **they're most interested in the bottle.**

15:06 Once they all gathered around the sink, T repeats his demonstration, whereas the first measurement is made with the device, then he takes it off, replugs the regular tap and measures again.

Nobody seems to find it strange that he wastes the water of the demonstration down the sink.

Science and proof sometimes require payoffs or compromises, they know this.

The researchers are very interested in the device, and how easily it can be installed; **"Simples mas functional !"**. As usual, **some ask if they can purchase it.** T explains that this is not possible, but that it is produced by AllAqua and certified by ANQIP, who are both partners of the project.

15:08 D joins the little remaining **crowd that still observes the device T has handed around after taking it off. Some colleagues congratulate PM and D on the project.**

15:10 We all go outside to take a photo with the children's group in front of the building with the flag.

15:15 We start taking the material off. Now I can ask PM questions about the beginning of the session and it's context. She explains to me that they started with showing the UN nations film on water scarcity that I've already seen on March, 1st at the Goulbenkian foundation. Then she **explained to everyone how the department was involved in the programme** and showed her PPP as well as ECH2O's videos, this is when I arrived. Moreover she details that the entire LNEC is a partner of the project but that only their department (Hídricas e ambiente) was invited to this meeting since they participate in the actual activities as an experimental community. The kids are from the daycare center since they are on school holidays. In one month T will come back and show them how he installs the device in the washrooms of the entire building. **She confirms that the kids already knew a lot, which might be because their parents are involved in research ?**

Around 15:30 to 16:00

PM, D and their Australian colleague invite me to the meeting room to have a brief talk about my progress. Mainly D answers my questions concerning today's meeting, their communicative strategy and one issue they face within the project :

Today: The researchers of the building 12 of LNEC, Edifício Fernando Abcasis, the actual department of hydraulics and environment, were informed about it on Monday, April 8th via email and the teacher of the children's holiday daycare center was invited through a conversation, also in the beginning of the week; whereas it was already programmed "a while ago" with the department director whom I might interview, if I wish.

They were glad to have **around 80% of the here engaged researchers attend the session**, especially the "important" ones, whom they know best. This is curious, since these people are very experienced

and “already know all this”, but apparently they enjoy watching APRH’s approach and actions. D is happy that they took the time to attend.

Communicative strategy: In response to my question about how they decide on the content they share on the APRH facebook page, D tells me that it automatically publishes articles of ambientemagazine.com related to the **keywords environment, energy, water, climate change and ecology**. Other than that they use the social network to diffuse the content of their newsletter.

This newsletter is a new means of communication, which D created during her governing period. She is concerned about keeping their **195 active subscribers** up to date on framing information on their core subjects. Thus, the weekly newsletter does not only communicate on member’s activities but is always introduced with a news-related edito written by her.

The mailing list which reaches about **4000 people** (municipalities, companies, participants of their events such as the Water Congress) is another channel of diffusion through which APRH promotes events of their ~1000 members.

Colleague from Australia: He is **convinced that awareness-rising projects such as ECH2O can make a change and are thus very important. He likes the practical side of ECH2O a lot and is overwhelmed by the effectiveness of making contact with individuals (“it is striking”)**. For researchers like him, ECH2O puts some reality to the numbers they regularly deal with, which is very refreshing for him and extremely useful, as it **reminds people of how important their daily habits are**.

Issue: D is concerned about the regular demands of the participants to purchase the device they use. This represents a big problem, since APRH is an expert network and **does not want to promote a product through the project**. ECH2O is meant to raise public awareness about water stress and invites its participants to make sustainable use of the precious resource. Even though it is a nice gadget to give visibility to the message that we are currently using retail water irresponsibly, **APRH does not want to give the impression that technology can save society from water scarcity** : Every single person needs to rethink and adapt, i.e. reduce their personal hydrologic footprint. ECH2O’s mission is not to deliver devices. **At the Gulbenkian foundation, things go a little differently from other participating institutions : Instead of having the device installed in all washrooms, the foundation buys 500 devices and distributes them to their employees who can then install them at home**. APRH will only show them how to install it.

Device: To my question if the certified device they use in the project is any better than others, free for domestic purchase in retail stores, D has no distinctive answer. She admits that they urgently need more information about those, but certifying is not ECH2O’s purpose. However, they already plan on asking DECO to conduct a study to evaluate the common devices on sale.



5 - Monday, April 29th, 9:30am first session at Escola Básica de Alto de Lumiar
 PM, D, third APRH-member, T,
 K, P, C,
 HM, teachers, pupils.

Contrary to what was agreed on our preparatory meeting roughly four weeks ago (the sessions for the 400 pupils was scheduled in eight groups from 9 to 12 am), when the three members of our research group arrived at 8:40 am and waited right in front of the school, no ECH2O team member was there. The remade schedule, which was sent to us in the week prior to the session but not recognized, is the following :



Waiting outside, we observed that **kids were accompanied up to the entry hall by most of the time one parent of theirs, mothers and fathers mixed equally, most of them dressed as if going to work after dropping the kids.** Roughly half come walking, the others by car. This already gives us an insight in the neighborhood's atmosphere, which walking here from the metro appears calm and well-situated. The visual impression of the families fits this appearance. Checking with the project manager (in the following referred to as PM) via a text message the session is only scheduled for 9:30 am. We use the left time to discuss our approach again at a nearby café.

PREPARATIONS

9:25 We arrive, present ourselves to the security officer at the entrance. By his behaviour we judge that **he was prepared to welcome exterior intervenants this day** : He asks us if we are here for the bicycle or the water presentation and leads us our way to the library, right next to the entry hall where someone has already put up a ECH2O Água flag. The library is a medium sized room, the **PM has already set up her powerpoint presentation and is ready, but for the video which would not play.** Another member of APRH comes inside and tries to make it work. He doesn't succeed either. Facing the projection screen are **two rows of pupil's chairs, in total 25.**



FIRST GROUP, presentation mostly by PM, D taking over, 4-6 years

9:30 The first group of kids arrive they are between 4 and 6 years old, and APRH's director and project launcher (in the following referred to as AD), too. They're accompanied by two female teachers who instruct them to take a seat on the chairs and once they are all taken in front of the two rows on the floor.

9:33 The teachers replace some children for no visible reason, they don't chat too much with their fellow pupils, they are impressingly quiet and look curious.

9:35 The PM decides to let go about the video and do without it. She addresses to the **37 children** who are now in the room, saying "bom dia meninos", altogether they reply in a choir "bom dia". The PM announces that today, we will be talking about water, because it is an **important element for us and the planet**.

She **doesn't explain who she is and why she came to talk to them** instead of having their teacher teach them. She simply starts presenting with the help of her PowerPoint slides that contain **visual and written information even though these kids can't read yet**. She regularly asks them to respond or to share their ideas with the class. All children appear to be very **concentrated and responsive**. They are all **absorbed by the screen** showing illustrations of the "blue" planet, the natural and urban water cycle, **only few make eye contact with PM presenting**.

9:37 The AD takes over and insists on the difference between salt- and freshwater. She implies the kids with questions such as "Do you know how much of the planet's water we can actually use?". She tells them about small amount of 3% being freshwater ("muito pouco") of which not all is of high enough quality to become drinking water.

It is impossible for us to say if the children understand what the women of APRH tell them, however they stay focused.



9:38 The PM takes over again explaining the Natural Water cycle showing an illustration containing written words. **No reactions any more** : in our opinion the pupils are confronted to too much information in a short time.

The low-standing screen is useful since the kids don't have to look up too high but it is also unadapted since the person presenting always covers up some elements and has to move around to let the kids discover. The PM explains difficult words like "precipitação" that includes rain, hail ("bolos de gel"), snow. From what they respond, **they only think of rain when being asked about water falling from the sky**. The PM always tries to keep them on track with queries : "Do you know what this is (showing an element)", "What happens here", etc.

One boy gets distracted by noise behind the half-opened door. The teacher recognizes it and directly snaps her fingers to get him back to attention.

Through a circular gesture around the picture, the PM illustrates the characteristics of the processes she just explained. **The kids do not show their agreement or understanding but when asked if they understood they reply yes in a choir, like they would do in class.**

9:43 The next slide shows the urban water cycle (another EPAL image). The PM asks if anyone recognizes any of the elements shown. **Some raise their hands to reply, others just talk. The PM who is not trained for education doesn't stick to the raising-hands policy of school and listens out the ones who just start talking before asking the ones who correctly demand to speak.** The teachers don't interfere, but when one child cuts another's speech. **The PM mostly looks at only one side of her audience, they respond much more actively than the other side.** The questions are very straight : "Who knows this element (pointing to one) ?"

They still do not show any signs of understanding or agreeing : this must be social behavior learned later, as they're only about 4-6 years old.

None of them knows the water treatment station, thus the PM explains it after the teacher intervened quickly : **Treatment is like taking the water to the hospital, treating and cleaning it, from the river to the tap and down the sink as wastewater through the treatment back to the river, or even drinking water.** The children show no signs of surprised either but tell in a choir that they understood.

9:47 The school's headmaster (further HM) rushes inside the room and reminds the team of the time, **asks to hurry up as the schedule is dense**. The AD tells her that we are almost done with this group, then takes over the presentation to ask the children where and when they use water at home? Her position in the space is the same as the PM's before, thus **she creates only little eye contact with the kids in the corner closer to the door**. She guides a discussion of good and bad domestic water use habits. The children have a lot of ideas, some are commented on by the teacher. **Now, more and more children raise their hand before speaking**.

9:49 many kids start talking to their neighbours, the teacher asks them to calm down again while the **AD watches the PM continue her explanations, they're both in front**.

9:52 With the **last slide, that is again not adapted to this age group because it contains a lot of written information**, the PM explains what is going to happen here in their school. Once they know about the technician installing a water-saving advice, **one boy asks if he can also come to install it at his home ?** The team members laugh and reply "não não", this is a school project. The PM speeds up her explanations, asks **if anyone has already seen a faucet aerator device as shown on the slide ?** **No reaction**. The other APRH member intervenes and asks them again, but still no reaction, so the **AD explains how it works**. They seem as if they had expected a more distinctive reaction of the kids. Thus they go on.

9:54 The PM tells that they will now be shown how the advice is installed now. AD asks the present teacher how to organize the venue to the washroom, brief discussion in front of the kids. **Not all APRH team members have the same information**. No evident reaction of the kids who don't seem very concerned, no excitement.

9:56 **AD briefly explains the context of the entire intervention : APRH is an organisation that works to protect water resources. One kid asks if they are part of EPAL ?** No, but they work closely together and now focus on public awareness (sensibilidade) and on water use practices. Tells about the "pegada hídrica", illustrating that using something, in this case water, always leaves a trace either on the spot or elsewhere ("uma marca de nossa vida"). Therefore, every drop saved matters to reduce one's footprint. While the AD explains this, the **PM just stands next to her and watches the floor, she does not search eye contact with the kids, then**.

9:58 she leaves the room in the direction of the washroom. The presentation is finished, the kids become more agitated, unfocus, so the teacher comments, completes what the AD, who is nodding now, just explained.

9:59 The **HM comes back to tell that this group really needs to leave now since the next one is already waiting**. All get up at once and the AD who stays inside the library says good-bye to everyone and finishes with "A água e nossa vida !!". Another group already waiting in the hallway comes in directly after this one is outside.

SECOND GROUP, presentation by D

10:01 My collaborators leave to the bathroom with the first group. D recognizes that some seats are not well-positioned to see the screen. We rearrange the room and make the children sit closer. The screen shows the first page of the PPP with the project's logo.

The D has to handle a conflictual situation : the PM who arranged and planned this session not being in the room, the D needs to take the decision if yes or no a second class can participate in this presentation, or not. **Finally it is their young teacher who simply grabs a book in the library and takes her class to the entry hall where she reads it to them while waiting because she considers the room to be too small. This is a very spontaneous decision she takes all by herself, apparently knowing that this will belate the entire school's scheduling. Nevertheless she must consider squeezing too many kids in a small room inappropriate for a certain learning condition. Even though all teachers and children's groups are very quick and organised, the schedule is definitely too dense for everyone to understand the project's intentions and for the team members to transmit it relaxedly.**

The other present APRH member does not interfere in these logistical issues, he only watches the scene.



10:04 The D says hello to the **25 kids who are between 6 and 8** they respond in a choir. **She then contextualizes : introduces me (K), tells she's from an association that works to protect water.** More interaction than with the group before. When she talks directly to one child, she takes off her glasses to look them in the eyes.

Her discourse is different. Doesn't ask exactly the same questions as the PM, even though some are similar ("How much drinking quality freshwater is there on the blue planet ?", good and bad habits, etc.).

We wonder if they prepared the presentation together or does one use the others material?

The children are very concentrated also. **They only talk when they're asked to.**

10:08 Slide with water cycle : one girl who had her hand raised for quite some time without being noticed now tells how she pays attention not to use too much water when **showering**. The D asks her directly if she knows the entire water cycle ? She says yes, **then the group replies yes in a choir.**

This behaviour is shaped by the school situation the project's intervention is put into. We do not know if the same children would participate in the same way if they were confronted to the same information in another context.

The D explains the water cycle element by element, **using technical vocabulary ("enfiltrar a terra", makes sinking gesture, "precipitacao", falling gesture)**. While she is illustrating this, a boy in the front raises his hand to comment on it. On the side some start chatting. The teacher lets it happen for some time, listens to their conversation but soon snaps her fingers to make them pay attention again.

10:11 The PM enters the room again with the giveaway kits. She doesn't stay.

10:14 PM comes in with another pack of kits, D now explains urban water cycle and wants to know if they know where the water comes from ? Tells what we need water for : cooking, etc. don't directly use river water but tap water that has been treated. **Kids do not react to this, they only listen.**

10:14 PM takes pictures of the scene with the clicking sound of her cell phone camera on. This distracts closeby sitting children, they turn around, watch. **PM talks to teacher, later we are told that many teachers congratulated the PM and D on their initiative and consider the topic to be very important.**

10:15 Slide with water uses, at first only very few raise their hands to respond. D listens them out, her expression tells she's happy with their answers, her body language is very positive, open. Nevertheless they do not continue responding, maybe this was too much information ? After the D listed some other uses verbally, they all talk around, shout out to their friends. **D focuses mostly on front row, some boys in back feel ignored and start hopping around on their chairs : the team needs to practice facing an entire audience that easily gets distracted, these are not academics, but children who need another kind of attention.** Teacher interferes for discipline : "You only speak when asked !!"

10:18 The group is still gathering info on personal domestic water use, everyone tells their neighbour, discuss. The D doesn't ask for quiet, the teacher does after maybe 40 seconds, the children calm down at once and D continues with next slide about preservation : "como podemos poupar agua ?". They read the sentence when D asks them for ideas, still mostly looking at the front row. Anyways, all kids appear more or less focused and participate with their ideas.

10:20 Our technician comes in and D explains that faucet aerators will be installed in the school to safe water. The entry door is now open, the adults in the back discuss how to proceed now (headmaster, school staff, technician, our collaborators). **D doesn't let them distract her from the presentation and talks with front row boy, only focuses on him.**

10:22 **Lots of noise outside coming from the bicycle project that's happening in parallel.** The kids here don't listen anymore, teacher leads them out in the direction of the washroom where they are going to see the installation of the device.

INTERMEDIATE TIME

10:23 APRH member comes over and asks me what I do. He's interested in my analysis so I ask him how he feels about this : **He considers the presentation to be too long and complicated for young children like these. He regrets that the film (same as shown to retired people in CCT about good and bad water use habits) could not be played.**

10:24 Next group already installing. The door is open, it's very loud.

The **HM comes in instructing all the present adults how to reschedule the next presentations** : the groups need to be received as she planned, in turns of two classes per presentation even if this means that there are many children at once. She appears to be stressed and rushes out directly afterwards. APRH members and present teachers do not appear very convinced of this being a good idea, but do not argue with her but start to discuss among them how to manage best. The children do not seem to understand and simply stay where they are seated. Nobody references to the kids.

10:26 Rearranging the room to make more kids fit in. **Already present kids (24)** now start chatting, it's not very loud, but teacher asks for quiet anyways.

10:29 **Headmaster brings in the other group (22 kids).**

Our research team moves around freely and helps when needed with arranging seats or the giveaway bags.

Many kids do now have to sit on the floor right in front of the intervenant.

Headmaster comes in again pointing on her watch, illustrating that again this is taking too long.

THIRD GROUP ~50 children, D, 6-10

10:31 PM and D both here, but D introduces again, tells that she'll speed up now, while PM takes pictures with clicking noise on, always distracting the kids closeby.

10:33 Blue planet slide. **D tells what we need water for, this first phase is only presentation, but when one kid rises their hand she'll ask the class to talk about their knowledge of water being everywhere.** While they still talk about it, she switches to next slide, so a lot of kids start to chat, they must have the impression that D only wants to make this presentation quick and doesn't really hear them out (**appearance of dialogue situation overcome by instructing transfer of knowledge as D is in more powerful position to determine how long every topic is to be talked about**). Girls in the back not concentrated, D doesn't recognize, never looks in this direction.

10:36 Natural Water Cycle : **D doesn't ask for ideas what precipitation means, but simply lists rain, hail and snow.** Third APRH colleague, also facing the children **must have recognized the confused looks on their faces, she steps in without presentation and explains** what hail is.

10:38 one teacher gets a call and takes it.

Kids don't listen to what their colleagues say. Are unfocused now but for front row. Teacher tries to calm them.

10:39 Urban Water Cycle. Now comes over to our side since she had to move in this direction to switch the slide.

Quite loud in here, teachers only snap their fingers to draw the children's attention on the presentation. D doesn't mind and just continues, asks if they know how it works, which elements they recognize ? Even though she doesn't respect the school's raising hands policy, the **D always hears out a child's she asks to talk until s/he finishes their point**, even though the other kids would talk in the same time. D tries to give the kid she talks to the **impression that their experience is worth being talked about**. Always confirms the answers with agreeing gesture or 'exactement' or 'e muito importante'.

→ **need training to manage a group of children**

10:44 slide with text como podemos poupar agua : **not as many reactions as with younger ones, but still there is not enough time to gather every child's answer** who wants to talk.

10:45 D cuts the exchange of experiences and now explains that the faucet aerators will be installed to reduce water use here in the school. The group is now back to quiet after D has been speaking a bit. Kids hear themselves out, too, when some report that they know about these devices and other water saving gadgets and behaviours.

APRH group in front starts discussing, they distract the kids sitting closeby.

10:47 D shows slide with pictures of the device and explains that the measurement is going to be per minute.

D interrogates the group what would happen when we run out of water ? Sem agua - slide : all chat around, nobody asks them to calm, the information is not gathered for the entire group, the presentation stops, D thanks them for their attention and lets them leave to the washroom.

10:49 before going out to see installation all applaud.

Other group already in the hallway

When going out they get a **bag with bottle etc that wasn't introduced here !** Some talk to D quickly, **say thank you and ask what the kit is**.

The teacher thanks her also and tells to go on like this, the topic is very important and APRH does a good job.

INTERMEDIATE TIME

10:50 Next group comes in. **Every adult is in a rush and stressed**. The headmaster is observing when group comes in. Gives instructions.

Already 45 in when she brings another group of 10.

Another teacher with **11 kids** arrives. Bring them all in.

Very loud. But rather coordinated.

Once the doors closed they calm down a bit.

10:56 All kids have taken a seat, their teachers arrange them in the best way, but there are kids all over.

PM seems destabilized. Asks for quiet, but nobody respects. One teacher tells stop it all, behave.

FOURTH GROUP, 7-9 years old, over 60 kids, PM

10:57 PM starts : “I will tell you about water today.”

Starts with water amount question. **All kids focused even though they’re so many.** Other APRH member stands in front next to PM. She’s very expressively comments what the PM presents by searching eye contact with kids.

Question: “Is there a lot or little water we can use to drink ?” “Muito pouco !!!” They respond in a choir. **PM repeats confirmingly.** Leads over to Natural Water Cycle through this, she uses the logic of her presentation and fills it with interaction with the kids.

PM mostly looks at kids directly in front of her, anyways all corners respond when she asks a question. **Older kids need less direct eye contact than younger ones to feel concerned.**

Focuses on “precipitation” again, together, they know all forms. **Then “infiltration” and “evaporation” are no longer explained. One boy has a question the PM doesn’t understand exactly, so her APRH colleague takes over and answers !**

11:03 Our research team members and the D come in and bring noise from the hall. Nevertheless, the kids stay mostly focused on the explanation of the natural water cycle, only little interaction.

11:04 ‘Outro’/Urban water cycle. When PM questions them if they know the elements, there are **less answers than experienced when talking about the natural one** : “What is treatment for ?” She tells more than she asks for answers. But she seems more comfortable now, makes more gestures, maybe now ‘warmed up’ ?

When a kid says something she considers right she repeats it, when she doesn’t consider it necessary she just goes on.

One teacher takes pictures, another a short video. Later we find out that these are for internal communication to the children’s parents.

11:06 finished explaining urban water cycle : uma pergunta ? Nao. Ok. Next slide about water use ? **Kids tell words in choir, PM takes in, smiling.** Her colleague answers a question yelled by a kid, cutting the PM’s flowing presentation. PM just looks at kids or floor while other talks. Doesn’t seem concerned. Colleague talks a long time, completes the explanation.

11:09 PM takes over again to trigger interaction with the kids. In the back rows some start chatting, others raise their hands to share with the group. No schéma concerning eye contact.

PM asks for calm “Shhhhh”, then explains again ‘outras formas’ of saving water. Kids focused now, calm, listen to their fellow pupils who speak up with their ideas. **APRH members confirm with smiles and ‘muito bem’. Teachers also nod and smile.**

11:12 Third APRH member explains that one never knows how much we’re using exactly.

Some kids look at our research team (K, P, C), too but they wouldn’t wonder too much.

11:14 PM explains installation in school done by the technician T.

11:15 C. leads them to the bathroom (--> see Portuguese report) and we start giving them the bags when they go out.

When the next group with **36 very young kids** comes inside, the **screen still shows the last slide of the presentation, not the project’s logo.**

P. discusses with third present APRH member.

FIFTH GROUP, D

11:20 D introduces herself to the group. **Asks if they prefer to talk about water or have lunch now ? All of them ask for “almoço!” (lunch). She laughs and starts her discourse by explaining that water is everywhere in our life and on our planet.**

All kids are now very calm. When asked, they tell where there is **water in Lisbon : Tejo, bathrooms,** etc. Only a few raise their hands, others shout in when nobody else is talking.

Two tell longer stories (+30 seconds) about their experiences with water (--> see Portuguese reports). Teachers take part in discussion.

D presents freely, **they can't read yet so slides only have visual impact ; no real understanding.** Needs to explain in detail. Unfortunately, **because of the small room, the PM often stands right in front of the picture so the kids can't see it entirely,** so they move around on their chairs or on the floor to try to see it.

11:26 Urban water cycle slide. Even without being asking direct questions kids fall in with their knowledge. But it's only valorised very briefly, **there is not enough time to go into detail,** as the schedule must be maintained.

When presenting, D always keeps her phone and glasses in her hand.

All kids seem to be focused. One boy gets hit by another who moves around on his chair. **Forced to say sorry by the D who observed what happened,** the boy is asked to go sit further away from his colleague. **With this gesture, the D takes a teacher's position who doesn't only transmit knowledge, but who can also call on her audience's discipline as she is an adult whom they have to obey to.**

11:30 Water use slide. D (who evidently **tries to speed up her presentation in order to satisfy the headmaster's demand**) **presents and only has them confirm they agree** with these uses being current in their daily life.

The kids appear very confident in their class group. Even when they are going to speak, they don't look around too much to observe their classmates reactions, but concentrate on the D who they address to.

11:32 D explains what the ECH2O-project is about and that they will now go and watch the installation of a water saving device. **One boy asks if they can do it in his home too ? She laughs and says no, without telling him that there are other devices that his parents could buy and install themselves.**

We wonder why she doesn't insist on how easy it is. In a later conversation she explains to us that she does absolutely not want to promote the device, neither give the impression that the resource can be saved easily without making an effort.

PM back, watches how her colleague presents, talks to the present teacher and the other APRH member.

11:34 Last slide with only words : D asks if someone can read what it says, teacher directly intervenes and dedicates one pupil, apparently not all of them are literate yet and the teacher avoids an unpleasant situation. D recognizes this and tells the kid who read “Really good ! Thank you”. Everyone is supposed to rush directly to the bathroom for the demonstration which is briefly explained by D before the teacher takes her group out : Group is extremely organized and behaves well. No discussions, the children just do what they’re told.

When going out they are given the bags by PM, other APRH member and P. **Not all kids are aware of the kit, leave without taking it**, so they need to come back once they recognize their classmates got something.

→ NEED TO TELL THERE IS A GIVEAWAY KIT WITH MORE INFO

SIXTH GROUP, Third APRH-member,

11:38 next group comes in, **very young also (3-6). 44 kids**

11:41 Third APRH-member, used to teaching, does the presentation. **She talks much more about subterranean waters** (here in Portugal mostly rivers, so easily visible) that her colleagues, asks for more interaction with the group than her colleagues. **She gets more responses and is more expressive with gestures than AD and PM, which gives the impression of the kids understanding more** → implication → framing → understanding → awareness of personal responsibility → eventual behavioural adaptation /or spread of this knowledge

11:43 **kids very excited, participate actively, talk around a lot.**

While there is already some noise, the HM asks me if I can video record the next presentation, I agree.

11:44 Third APRH-member switches to the Natural Water Cycle, **tells** very quickly how it functions instead of taking lots of time to explain in detail as PM and D did. **She doesn’t ask** the kids, who are watching carefully, for reactions here.

11:45 When talking about the Urban Water Cycle she insists on humans’ position in it, strengthening that correct water treatment is a high responsibility for other people and the environment. She’s expressive in her gestures and mimics, points regularly to the respective part of the schema projected behind her. This is the only moment when she really uses the visual support. Other than that she **obtains their concentration and participation through her communicative being.**

→ Is PPP really necessary for these young kids ?

11:48 PM and D who left the library before the sixth presentation started, enter. They watch for a short time (~30seconds), then count the children in the room. Probably they have been preparing the kits before and now need to know how many they will need. They appear concerned, especially the PM regularly checks her phone for the time, then takes some pictures.

11:49 Presentation is finished with the open question if anyone still has any : This situation is very scholastic: **She, the expert, is ready to tell her audience about her field if they want to. Is another expert positioning possible here ?** PM and D both leave, come back immediately with the kits and prepare to hand them over to the children who are lining up to leave.

11:53 All children have left after thanking the presenter who **did not go through the entire presentation, neither told them about the installation of the device or the kits**. They appear to be happy, but tired, they don't chat around much but concentrate on leaving.

SEVENTH GROUP, D (filmed, thus only very brief summary of observation),

11:55-12:19 Another, even bigger group (**57**) of **older children is installing autonomously**, the noise level is much higher than with the younger groups. They are **less focused, probably hungry** (D asks them, too, if they prefer to talk about water or going for lunch, the collective answer is : "almoço!"), **intruiged by me and PM filming D's presentation**, which is similar to her last ones. Nevertheless, they **participate when asked**, mentioning mainly the same aspects as the other groups : **domestic water use for bathing, cooking and cleaning the car, toilet flush, laundry machine**; and water saving through closing the tap when brushing teeth, recycling cold water of the shower for watering plants, etc.

EIGHTH GROUP, Third APRH-member (filmed, thus only very brief summary of observation)

12:21 **44 pupils, between 6 and 8 years old, quieter than the group before**, teachers ask them to sit down

FILMED : Third APRH-member asks for even more interaction with the group than during her previous presentation times (group 6)

12:40 presentation is over, APRH-member 3 calls **on two major water- and eco-friendly behaviours : drinking tap water in order to spare plastic waste for bottles and CO2 for their transportation, here she speaks about the APRH-bottle in the kit (active marketing), and faucet aeration to save tap water from flowing down the sink without being of any use, introducing the demonstration that the kids will now see. → more links between topics and action in school.**

12:45 All pupils have left, research group and APRH member tidy up the room, when headmaster comes in to talk to one of our collaborators from Brazil. They converse about the county and international water scarcity for about five minutes, then headmaster has to leave, thanking us for our presence. We finish tidying up and wait in the school's entry hall for our third collaborator and the APRH team who are cleaning up the washroom.

13:15 We all leave.

MASTER IN ECONOMICS AND MANAGEMET OF S&T E
INNOVATION
SCIENCE, TECHNOLOGY, SOCIETY AND ORGANIZATIONS

Document of P.

CONTACT 02

When: 2019/04/29

Where: Basic School of Lumiar (Alto da Faia)

Participants

APRH: Director (D), Vice-President/Third APRH member (VP.), Vowel (V.), Secretary and Project Manager (PM), Technician (T.)

School: Establishment Coordinator (HM), Teachers (P.), Assistants (A.), Students (C.)

ISEG: Masters Students (M.)

Summary

- The event starts at 09:30h, instead of 09:00h. The school is busy with many students outside their classrooms and the central courtyard is very noisy. The presentation sessions begin and they are done by the Association representatives, in rotation. The library, place chosen for the sessions, has limited space for children's good accommodation. The approaches have some playful aspect and the slides seem very technical and have no color or other attractions for children. There is no differentiation by age between the kids. The first hour is marked by some confusion and interruptions. Sometime later, the program begins to flow more easily. The 'before and after' demonstrations of the new device impressed the students and teachers. Due to the delay in the schedule, it's not possible to perform the drawing activity on canvas, which will be rescheduled. At 13:15 the event ends.

Detailed History:

- 09:00h: I arrive at the entrance of the school and see the other masters students. The entrance is quite busy with the arrival of children to school. I go in search of the group, and the janitor requests that I return after some time and informs that only at 09:30 the ECH2O-Water project session will start.

- 09:30h: M. return to school together. The janitor welcomes us and indicates the way to the library. We get there and greet D and PM, that are in the room, next to the computer, **verifying the transmission of the slides on the projection screen**. V. also presents himself to me and sit on a corner of the room. The room is prepared with two rows of chairs and a space at the floor equivalent to two more rows to the children sit down. **There are many shelves and other tables limiting the space for presentation.**

- 09:35h: I notice a lot of noise in the central courtyard and soon I see the teachers entering with the kids in the library. Some of them talking with each other, others observing our presence and others observing the room. They are positioning themselves and teachers are putting the children closer together, due to **limited space in front of the projection screen**. One of them closes the door due to the external noise. The door range when open/close.

- 09:40h: PM is already presenting and I realize that she interacts with the children during the presentation, asking about situations that they can perceive. They respond well. Teachers are attentive to the children's behavior, so as not to distract or talk. P. 1 takes several photos during the session.
- 09:45h: Children raise their hands to ask questions and also talk about their perceptions, some not so directly associated with the topic. **PM uses expressions to facilitate understanding by children:** "Take out of the river", "Water Hospital", "Good water to use". PM asks the children how they spend water.
- 09:50h: HM Enters in the room for a brief look and withdraws.
- 09:51h: The kids answer the question posed with several examples. The next question is about how they can save water. **Children can give answers, but they also converse in parallel between them.** The main examples are to **turn off the tap while brushing your teeth, not bathing with a full bath.** They get more agitated.
- 09:55h: PM asks "And what are we going to do here at your school today?" She explains that the taps pour a lot of water out and that they will put filters to decrease the amount of water. P.1 argues that the children of that session are from the first cycle and will not participate in the demonstration. She raises some issues that doesn't seem align with what was discussed in the first meeting.
- 09:58h: In the face of some of the children's questions, V. answers 3 of them, but in a **very technical way for kids and answering with another question.** He ends up not generating any interaction and closes the answer.
- 10:00h: PM thanks everyone and **says they will deliver a kit.** She's headed to the door and asks me to accompany her to help with the kits. We're going to a support room where the janitor and/or assistant usually stay. When we get there, she shows me the boxes closed with the materials. We distribute on the table each material that forms the kit: The bag, a leaflet and a bottle. We start assembling, putting in each bag a brochure and a bottle. A. 1 helps us as well. She knows exactly how many students have in each of the classes that attended the session.
- 10:10h: As the classes that attended the session had already returned to the classroom, A. 1 takes us to the classrooms and PM deliver the kit to each student's hands. **The children are agitated and curious to open,** but we quickly leave the classrooms, when again PM thanks for the opportunity.
- 10:15h: During the return to the central courtyard, PM thanks also to A. 1 and explains that **there was no time to prepare the kits before the first session.**
- 10:17h: I return with PM to the library, where D is practically starting the second session. The room is already full and the central courtyard continues with many students and a lot of noise.
- 10:25h: There is an interruption by HM, which speaks loud about the time the action is taking and about the number of kids in the room be smaller than were planned. PM and teachers present in the room argue with her because of the little space in the room, but quickly the **HM clearly puts the need to accelerate and says that it is disturbing the organization of the school: "It must be like this, it must be like this"; "It has to fit."**
- 10:30h: The session has no continuity until come another class, which had already been addressed to the library, but did not enter initially. P. 3 comments that she is not in agreement to put so many children in the room. While this group is at the door of the library, teachers who are already inside the room and representatives of the Association try to rearrange the spaces to make the children fit.
- 10:32h: As the library entrance is full, I go to the central courtyard and I really notice a lot of noise. HM takes off from the library and just right in the corridor addresses PM, saying "It is very complicated"

and charges a position of why the delay, with the timeline that had been drawn at the first meeting on her hands.

- 10:33h: Practically while the conversation is happening, a new group are positioned in front of the library and P.4 says that the schedule for her class is 10:30h and so they are waiting there. HM directs them to return to the classroom until they are called. With the entrance of one more class and the return from other to the classroom, the courtyard is now less crowded and less noisy.

- 10:35h: HM returns to her office and on the way, I see her addressing one of the assistants, asking for help in the organization. It references that the way it is happening **embarrass other activities**.

- 10:37h: Then I return to the interior of the library, with the second session already underway and the presentation this time is being made by the D. I notice PM quite embarrassed. Meanwhile, outside the room, T. goes to the school bathrooms to install the device on the taps, accompanied by a school representative.

- 10:45h: **The room is very crowded, I quickly count more than 60 kids present**, besides the teachers and assistants. Some children raise their hands to ask questions and agitation increases. P.5 calls attention from the children: "The colleague cannot hear the question of the other."

- 10:50h: D talks about the demonstration of the installation of the device in the bathroom during the presentation: "Everyone will see the installation, right?". **I notice that the approach generates doubts in the teachers, as if they do not know whether or not everyone should go**. PM leaves the room to check if everything is prepared and then returns, giving signal to D finish the presentation.

- 10:55h: With the end, the children clap hands and receive the kits as they leave the room. M.1 helps to pull the kids in line with the teachers to follow to the bathroom. In a quick question about what he thinks, C.1 says "I like it."

- 10:58h: The central courtyard is still full of people. HM and teachers of the next classes **make fit 3 big classes inside the room to take the delay**.

- 11:00h: Will begin the third session. Before PM starts the presentation, I **ask two children if they know what we're going to talk about today**. C.2 says "Yes, it's about the water." The other child agrees, nodding.

- 11:05h: Still at the request of PM, I help to bring the kits from the support room to the library, which were, at the time, already assembled by 3 assistants, even with routine interruptions. I see that they had already assembled almost 100% of the kits and counted to facilitate delivery.

- 11:10h: I return to the library and put the kits in the entrance of the room. At this moment, PM is taking the same approach about the demonstration in the bathroom, as done by D. Again, I notice the look of **doubt among the teachers**.

- 11:25h: The session is completed and the classes go to the courtyard, waiting their turn to see the installation in the bathroom. **I approached P.6 to know about the age of the children in this class, their reaction and what she thinks. She says that the children are between 8 and 9 years old and put: "The kids are very involved with the environmental problems". As evidence, she asks me to observe the way the children are seeing and talking about the brochure, very interested. I agree, indeed. She also says that already knew how the event was going to be and that she liked it.**

- 11:28h: I return to the library. The fourth session began at 11:20h and GP. are conducting the presentation. Children are younger, between 4 and 6 years old. They are **participative, raise their arms to ask questions and give answers**. Teachers call attention strongly of students distracted or that are

make noise. I notice that the younger children of this group are even more scattered and are observing everything and everyone in the room, but not the presentation itself.

- 11:35h: PM enters in the library and reports that there are still 3 sessions remaining.

- 11:45h: The fifth session begins. Again, the classes have students between 4 and 6 years old. The presentation is conducted by VP. Children respond to questions posed and are more agitated. I perceive that the teachers of this session are more attentive to the presentation and also to any distraction from the students. **The shape how VP. is driving is different, more playful. She asks using expressions like "pets", "animals of the waters ", " did you knew that..." . Speaks in a tone of history telling and it seems to have made a difference to attract children's attention.** She also explains what the device does in order to make it clear to them: "... **Will leave more water in the rivers, so the animals can live more also** ", "... and protect the planet Earth. "

- 12:05h: I invert participation with M.1, and now I follow the classes in the bathroom for installation of the device. When I get there, I talk to T. to learn how is the dynamic of the activity and help him to mark the time to do the demonstrations.

- 12:07h: Enter one of the classes first, and in a very order way, the children are positioned in rows. P.7 guides "The bigger ones in the back queue and smaller in front". T. makes the approach and first shows the number of liters spent per minute with the faucet the way it was without the new device. **He invites the children to count from 1 to 10 and gives me the signal to mark the 10 seconds.** The children count. T. raise the bag to show the marking and informs the line number: "Thirteen liters". He shows the children the change of the device and invites again to a new count. T. raises the bag for the second time and asks the children what happened: **"How many liters do we have now?" Children watch a few seconds and get impressed. T. says "Three liters." The reaction is collective "Wow!"**. The kids clap hands. T. finish the demonstration and thanks the children. P.7 is very satisfied and thanks us as well.

- 12:11h: Enter another class into the bathroom. **T. leads in the same way.** Children are similarly positioned by the teacher with help from an assistant. The children are looking out of curiosity. In the first measurement, as T. raises the bag, C.3 interrupts "There's a little hole in the bag." Everyone laughs and P.8 says "but turn to attention there, the hole is irrelevant to what he will show." T. points the water level line measured in the bag. When he switches the device, I see some children commenting softly: C.4 "The new one is blue..."; C.5 "I like blue"; but teacher does not let this conversation take proportion. T. asks the children: "what now?" The children **are very impressed with the difference of the first measure, they talk between them and also with the teacher about the fact that they enjoyed it.** P.8 thanks and also makes all the children thank us and say goodbye to return to the classroom. On the way out, P.8 says she stayed **"... Impressed by the difference. I had no idea it would be like this"**. She eulogizes the action and when I asked about the environmental perception of the children, she said that the children of the school, in general, are very conscious and that it **also has to do with the parent's level of qualification, almost 100% with graduate degree.**

- 12:15h: **While we were expecting other classes, P.7 returns to the bathroom entrance to tell us how much has enjoyed it. She also comments that in the next day there will be a parents' meeting, and that she would like to talk about the event and the results of the device. She asks T. in which stores and which brands of devices can be recommended, because it's interesting pass this information also to the parents and share with all the school employees.**

- 12:30h: Starts one more demonstration. They're older children. They enter in a less organized way, even with the teacher's orders. The children are struggling to get the best place in front of the sink to see the demonstration. I give my place for smaller children to get closer. The bigger ones try to stay

ahead and it is necessary that the teacher to pull them to stay behind. I notice that some children are so bothered by the place they are, and **I suggest they look through the mirror too**. Despite the initial tumult, the children make questions more elaborated and share what think about it. **C.6 says "In my house we use it"**. C.7 asks "Are you really going to install that in the whole school?" C.8 asks "And how do you do it on the spinning tap?". In the measurements before and after, **the children say that they can't see very well what is written in the bag. T. reads the numbers**. At the end of the demonstration, P.9 asks about the difference between the old device and the new one. **T. explains that the new device allows the air to get mixed with the water in a bigger proportion**. I notice how the children and P.9 were surprised. The students' mood is calmer after the demonstration.

- 12:40h: While no more students arrive, I talk with T. I ask about his background and insertion in the project. He says he is elaborating his master's thesis at the University of Faro, focusing on water resources management, and VP. is his advisor, who has excellent qualification and communicates very well. **He says that is enjoying a lot. I also ask about the trips' schedule, since both are not Lisbon residents. T. informs that only 3 days before was aware of the agenda of the day**. I ask about the device, specifically how to get it and how important is to inform other people as well. **He said he generally does not pass more information following the association's guidance, as the supplier's project only act on large scales**. He believes that this information could be shared without restriction, as it helps reduce consumption by those who are interested. I also ask about the bag, which in fact is with the markings little visible. He agrees and informs that is a German material and that also does not have another. He compliments that they are trying to get a manufacturer for it in Portugal.

- 12:45h: I reach the children's bathroom for the next demonstration, which flows very well. Children are less agitated. **The comment of the holes in the bag is also made by the children who are closest to the sink**. The collective reaction "Wow!" is pretty strong. P.10 also comments that it would be very interesting to address the agenda at the parents' meeting. On the way out, **I ask C.9 which part of the day he liked most. He answers: "To see the switch."**

- 13:05h: I try go back to the library to check how it is flowing there, and I come across another class going to the bathroom. **P.11 says that there is still time before the break and it is very important for children to see the demonstration**. T. soon appears in the corridor and leads the class. **Children interact and participate in the measurement count**. The class is quieter and after they see the results, the kids clap their hands.

- 13:15h: Returning to the library, through the corridor I already can see the representatives of the Association and my colleagues in the central courtyard. HM is saying goodbye to everyone when I get to them. We all say goodbye and leave school.

Report of the session of sensitization and installation of the devices of the ECH2O project in a children's School of Lisbon in 04.29.2019

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Contents

Eight sessions of about 20 minutes were performed for approximately 390 students, aged between 3 and 10 years. After the presentations were performed, the students received a backpack containing a bottle and a project sensitization flyer. Some classes had the demonstration of the flow of taps before and after the installation of the device.

The awareness sessions were held at the school library. There were **no chairs for all students**, some organized themselves on the ground more forward, close to those who were presenting, and others organized themselves to the bottom and to the left of those who were presenting. **The children who were in front received more attention from the presenters, their questions and answers were heard more frequently than those of the children in another position.** For many times, especially in the classes with children of lesser age, children raised their hands in a sign of wanting to speak, but the presenter did not see them or did not hear them. In the older classes, the sign of raising the hand worked better because there was more silence in the library, as if the children were paying greater attention in the presentation.

The time available for each session was 15 min, which was exceeded a few times, triggering a series of events. There was a class of students already waiting outside the library almost all the times. The school director entered the library informing about the need to gather more students so that it was possible to fulfill the schedule, or schedule a new day for the presentations. **These negotiations were sometimes held within the library, in front of the students and while the presentation was happening, causing some discomfort.**

The presentation held in the library contained a material of approximately 5 slides consisting of images and text. I perceived the presenters attempt to **use metaphorical examples to better understand the concepts, such as calling the water treatment station "Water's Hospital",** or explaining that in the cycle Urban Water Our faucets pull the water from the rivers and **we can not keep it long open so the animals do not stay without water,** or explain that the **steam that forms the rain is like the steam formed "In the pan when your mother cooks."** The presentations were performed by 3 different people. It was possible to observe **different ways of explaining the material.** The one that brought **more diverse examples and brought more energy to the presentation** also acts as a teacher in another place, which may indicate the **need for a previous experience with teaching.**

It was possible to realize that the younger classes had more difficulty concentrating in the presentation, there was more noise in the library and it was possible to observe many children looking at other places. The **material composed of text may be less playful than it would be necessary to sensitizing children of this age.** In the older classes there was more silence and the children were kept focused for almost all the time of the presentation.

Two questions made by the presenters led to children's daily lives and had a greater participation of them: **"How do you use water in your home?" and "How do you save water in your homes?"**. The vast majority of the children answered these questions, raised their hands, talked to their colleagues alongside, there was uproar in the library. In response to the use of water, the act of bathing and washing the car often appeared.

When leaving the library, the children received a backpack from the project with a blue bottle and a sensitization flyer. The children were always excited about the kit and come out chatting with their colleagues, seemed **curious as they opened the backpack.** I observed many students questioning the color of the bottle for the other colleagues while they looked at the bottle's box that has pictures of

bottles of various colors. The **older children looked more closely at the sensitization flyer** and were making comments with friends or with teacher about the game of words that contained there. Children of a lesser age, perhaps because they didn't know how to read, didn't pay attention to the flyer, just took it out of their backpack, looked for a few seconds, and returned it.

For the demonstration of the installation of the device in a bathroom, it was necessary to separate the classes most of the time. While a class was observing the process, the other was waiting outside the bathroom. The children were around the sink while the technician explained the step by step of what he was going to accomplish. **In the first class, the technician asked the professor to make the 10-second count on his cell phone, while he filled the plastic bag. In the following class, the children took the initiative to count the 10 seconds aloud, which demonstrates how excited they were with the experience. In the following classes, the technician started to stimulate the count aloud with the children.** Students and teachers outlined reactions of surprise and admiration when the technician showed that after the installation of the device, were measured at least 10 liters less water. Several teachers took pictures of the moment in the bathroom. In the younger classes, it was sometimes necessary to have a final explanation of the technician or teacher about what it represented.

These observations allow me to infer that it would be more interesting to use a different material for classes with different ages, making use of more playful materials. The library seems to me not to have been the best place to perform the presentations, because the children were not comfortable and did not allow them all to have the same vision of what was being presented. This caused difference in the attention given to the children by the presenters too. The time directed to the activity was tight, not allowing escape time to organize children and classes, at the entrance or exit, everything seemed to occur in a very accelerated way.

Detailed report

8:27 I arrive at the children's school and await the other people in the group. Between 8:50 and 9:00 we received the information that the event at the school will be only at 9:30 which gives us time to have a coffee before we go inside.

9:20/9:30 we enter the school and ask where the event will be. The responsible for the school's entrance questions us whether it is the event of the bike or the Echo and directs us to the library. This allows us to infer that another important project was occurring in the school. I Position myself at the bottom of Library. A Project Manager, which will be referred later only as PM, is stirring the computer and adjusting the presentation that will be made. An error occurs and does not allow the display of a video. Children enter the library and with the help of teachers begin to organize between the available chairs and the floor. There are two professors and two different classes in the library. The Director of the association, who will be subsequently referred only as D, conducts an intervention in the presentation and questions the children if they know why the water is called freshwater, several children answer the question at the same time. Some children in the background are not paying attention and talk to each other about not touching their legs, I think they are uncomfortable, there are many children for few chairs. The PM and D ask questions to the children, who raise their hands in a sign that they have the answer, but **the PM and the D do not correspond to this "rule of order" of children, other children participate without raising their hand.** The PM uses the example of the mother cooking at home and the steam coming out of the pan to explain the formation of steam and the rains, in the water cycle. When talking about rain, snow and hail, children participate and give examples of what they saw and when they saw. When the PM questions the children about the understanding of the water cycle, some children respond timidly that they do. To explain the meaning of treatment station PM uses the

word "water Hospital" and is soon understood by the children. When performing another questioning, a child who is more at the bottom raises his hand and responds, but his colleagues who are ahead talk louder and the PM does not listen. A teacher who is next to the child repeats aloud the response of the children and points to him. When questioning children about how they use water at home, several raise their hand, several respond, almost all want to participate. Examples like washing the car and bathing arise. When one of the children gives an example of water expenditure in his house, when someone forgot a tap open for 15 days, the Vowel of the association, which will be subsequently mentioned as V, makes a punctual comment aloud that that example was a great expense of water. When the PM questions about how children brush their teeth at home, there is uproar, all children seem to want to respond. The PM continues and asks who of the children bathe with the tub full, the uproar continues, the children talk to each other. There's noise. The PM explains about the device that will be placed in the taps of the school to save water, a child speaks that it would not need the device, which is only open less the tap. The V gives a technical explanation to the child, I do not understand very well. The PM says the child is right, that if people are more careful, they will spend less water. The PM continues to explain that the older children will see the technician installing the device on the taps, and that they'll notice the difference afterwards. **The PM and D argue in front of the students the order of activities, if it is better to go to the bathroom or change the class.** D explains that it works in this project to sensitizing children to save water, it speaks the expression "water footprint" and demonstrates a person walking and forming footprints, so that children understand better this technical term. There's noise in the library, a teacher draws the attention of a child. Right now it seems to me that the children are no longer paying attention, several of them move, yawn, stretch their legs, are no longer focused as in the beginning. The presentation comes to an end. The kids come back to their classroom holding hands, talk to each other, but I can't figure out what they're talking about.

I enter in the library, the door range, some kids look at me. I am near the front door. There are older children in library now. **Children give an example about energy expenditure, or on the dripping tap.** The presentation is being made by D who asks if there is much water in the world, some say that much, others say that little. A child raises his hand and waits for his turn to speak, but D takes a long time to call her. The child says that when bathing, your mother speaks to use only a spoon of water. D uses the child's example to explain the proportion of water we have. Another child says that the grandmother already had to stay four days without bathing because of the lack of water. The D asks if the children have heard about the water cycle, some children answer that yes. D explains the water cycle and talks about infiltration. A child asks aloud the meaning of the word Infiltration. Other children explain that it's "getting under the ground". A child says that the grandmother has a well of water while other children talk at the same time. The children lose focus. The PM enters the Library with several bags, the door range, the children closest to the door look, there is a child who has lost attention and is looking at the bags. The D asks if the children know how the water arrives in our house. The children respond that the water passes through machines. The D explains in a less playful way, perhaps by the age of the children. When asking how children use water at home, there is uproar and almost all the children speak in some way or speak loudly or speak to each other. When asking how they can save water, several raise their hands to speak. There is noise in library because some children talk to each other, some give examples, but most already is without attention. The D asks for silence. A class teacher asks for silence aloud. The P explains that they came to school to check the bathroom taps, and that is awaiting the Technician to perform the installation of the device in the taps. D shows what will be done and children pay attention, almost all look forward. Two people enter the library, the Technician and the Vice-President of APRH, which is going to be referred as VP only. They all look. **D shows the Technician and says he will put the device on the taps.** The headmaster of the school, which will be subsequently referred to as HM, enter the library saying that they are late and suggests that the

presentations should accelerate. The PM responds that the delay is because children carry out many questions and they do not want to cut them. D says they'll have to add more classes in the library. The teacher says the library don't fit more classes. **The HM says if it is not possible, they will have to make the introductions in more days.** D, PM, HM and a teacher present at library discuss on this subject in front of the students, not caring about the presentation that is happening at the moment. I realize that the discussion brings stress to the organizers as a whole. The kids line up to win the kits and go out of the Library. There is another class outside waiting to enter. Children who have just participated in the presentation open their backpacks, they make expressions of surprise and they thought it was cool. Some talk about the colors of the bottle, because they are inside a box with indication of possible colors. But All the bottles are blue. A child opens the flyer of the project and becomes happy when he sees that has a word-play game. The children are excited with the kit, specifically with The bottle. Some open the flyer. **A Child looks into the backpack to see if there is another kit and realizing that there was only one paper, returns it in the backpack.**

I enter the library, the door makes noise, some children look towards me. D, PM, VP and a teacher are talking about the format of the Library and about how it can fit more students. They rise up and organize the library to fit more students. They move a book shelf so they fit more students sitting on the floor. The children now rise and exchange places. There is a bit of a mess and the teacher draws the attention of the students. Another class is coming into the library. The HM says that it is complicated to manage the 400 students with 2 projects occurring at the same time. HM is directing students to enter the library. HM seems unhappy and stressed by the way she talks. The children enter the library and move to the bottom of the library to organize themselves. One of the teachers tries to organize the class abruptly, carrying some children by the arm.

10:30 HM enters the library and says that this presentation can only go up to 10:45.

D displays the slide with the image of the Earth and the comparison of the amount of fresh and salted water. These children keep faces facing forward, everyone seems to pay attention to the explanation. The PM enters the library with bags. The closest children look with interest. D explains about the condensation of water in rain form. One child asks about how the clouds form. D smiles and VP answer the student. Another child asks why the raindrops are small, the VP assists in the explanation again.

There are children with a raised hand, several want to talk. While D answers a question addressed to a child who is in the corner of the library, there is noise among the children, several talk to each other. One of the teachers keeps asking for silence and squabping her fingers. D ask students what can happen if they are left without water. **Some kids in the back of the library don't seem to pay much attention.** The children who are sitting ahead seem to be paying more attention. D questions how students can save water at school. The class is more silent, they seem to be more focused on the presentation. The PM, who is beside me, has looked out of the library twice, which leads me to believe that she is worried about the schedule. PM leaves the library and the door makes noise. The children look. PM enters the library and warns that another class is on the way. D do the final announcement of the presentation. There's noise. The children clap their hands. The kids form a line to pick up the kit while they leave the library. There 's another class waiting at the library exit.

The children who have just received the kit comment on the water bottle. The children think that the bottle is of different colors and question "What is the color of yours", "Mine is Blue". I'm going to accompany this class, the kids sit in the stairs. We are awaiting the technician that will install the device in the bathroom. This will be the first class. The technician delays. **The teacher takes the wait and**

explains to the children that the bottle is much more ecological. Almost all children open the flyer and speak to each other. There are more children who open the flyer. In this class, I believe they already know how to read. A student opens the flyer and will take a question from the teacher. Other students are happy with the word games in the flyer. The teacher questions me if the technician will take even longer. I'm out looking for the Technician. At the foot of the ladder, D, technician and teacher talk about in which bathroom will be made the installation and whether it will be done at this time. The Technician and D do not know how to report, they seem to be half lost. The technician suggests the bathroom on the first floor and the teacher takes the direction. The kids get up from the stairs, put on the backpack and go to the bathroom.

10:55. The Technician invites children to enter the bathroom. The children pile up around the sink where the device will be installed. The teacher asks the children to take steps backwards so that everyone can see. The technician asks for help for the teacher to count 10 seconds and gives her his cell phone to use the timer. The Technician explains that he will fill plastic bag with tap water for 10 seconds. The teacher starts the counting with the timer. The technician shows the plastic bag with water, a total of 13 liters of water. The kids want to see better and complain they can't see. The technician shows the piece that will be placed on the tap. The school bell rings and that gets in the way of listening. The children are between looking at the plastic bag or look at the teacher, eager for 10 seconds. The teacher says "stop." The technician shows the same bag with only 3 liters of water. The Kids look surprised, think it's cool and make noise. One of the children says it will be better not to spend water. The teacher helps in explaining how this will help in the water economy. The children clap hands and say "thanks" and ask the teacher about where the devices will be installed. The teacher responds that they will be installed in all taps of the school. The students talk between them "cool," I think they're excited. The teacher used the example and contribute so that her students could understand the example given in the bathroom. Children are older and seem to understand better what's going on.

11:03. I enter the Library and it seems to me that this is the class has older students. They're children between 8/9 years old. Children are quieter and looking forward, they seem to be paying attention. A teacher takes a picture of the presentation. **D questions how students use water at home. Examples such as bathing, washing the car, washing the clothes arise.** The VP uses an example given by a child to explain about water technology, says that in countries where there is no treated water dies a boy with their age every 5 minutes, that water treatment is a very good technology, but that spent a lot of water at the same time. **Two students say they have an EPAL hourglass that measures the time to brush their teeth.** There's more silence in this class. D obeys the rule of hands raised so that children respond to questions. There are several children with hands raised.

Children leave the library happy with the kit, open the backpack and catch their bottles, open the flyer and read. There's more than one class to perform the experience in the bathroom, they're deciding who goes first. There's indecision, technician and teacher don't decide. The teacher decides that her class go the in front with the Technician. The teacher takes pictures of the experience in the bathroom. The children show an expression of admiration when the technician shows the bag with the amount of water that spends less. The teacher herself looks surprised.

In another class, the children proactively begin the count of 10 seconds aloud. At the end of the presentation of the technician, they clap hands to the result of the water reduction. The teacher took a picture and say "spectacular"! While the students are in the bathroom, the technician addresses me and says that this is the best part of the project, see the expression of surprise in the face of children.

A class of students aged 5/6 years does not seem to understand very well what the technician presents in the bathroom. It seems to be necessary the final explanation on the part of the technician regarding the drastic reduction of water between one example and another. Another school worker, who observes the experiences of the bathroom from afar, comments with us that it is important this work to sensitize students, because they love to be in the bathroom and always spend a lot of water. It's 11:49.

In another class, at the end of the presentation, a child is directed to the technician and says "I am Brazilian"! The technician comment to me that this fact was perceived by other students and that he listened comments among the children during the experience of bathroom.

There's a class in the bathroom and one waiting to enter. As soon as the first class experience ends, HM enters the bathroom complaining about the delay in introductions. The first class comes out of the bathroom without time for the technician to explain better to the children. The children seem not to have understood everything, because they did not have the same surprise reaction from the other students.

I go back to the library to accompany other presentations. The teachers are talking about children's right to image because some of them did not bring parental consent. The kids seem to be older. D asks the children to keep their doubts to the end of the presentation. The door makes noise and some children are disconcentrated. There's more silence in the class, and the kids seem to pay more attention, maybe on account of their age. **One of the present teachers is taking notes of the presentation of the project.** In the question about how students use water at home, examples like **bathing and washing car** appear again. There 's a noise. It's 12:12. P has opened up space for students to ask questions. A child questions how the device that will be installed on the tap can reduce the water if the faucet continues to be the same. A teacher asks if this device can be adapted to their residences. **HM is approaching the library with another class outside. There's a noise. The students are leaving the library and taking their kits. HM is at the library door directing students in a more agitated way using the words "advance, advance", "speed up".**

12:23. This is the last group. VP performs this presentation and starts in a more smiling and more energetic way. There's silence, the children pay attention to the presentation. The PM enters the library with bags, some children look. School's bell rings. VP explains about the mobile application that will be built for the project. The noise in the library is parallel conversations. The children show interest in the mobile application. **VP talks about how water treatment technology has evolved, and this allows babies not to die at birth.** A child doesn't understand and looks scared. The VP tell the example of Nigeria, where 30% of babies born die because of untreated water, and in Portugal only 3 in each 1000. The child presents an expression of surprise.

12:36. There is parallel conversations in Library. **A child talks about Portugal having more old people than young. VP gives the example of Nigeria again, in which people have 7 or 8 children, and half die before completing 6 years old. Kids look surprised, a little scared.** There's noise in the library, parallel conversations. VP explains about the kit they will receive, that there is a bottle and a **flyer with games.** VP explains that the bottle will help us not to drink bottled water, which are the most solid residue we produce.

Library is empty. HM thank us for the presence. We talked about other issues, not about the project. PM, VP, the Technician and we talked about the upcoming agendas.

6 - Monday, May, 6th 2:30pm at Centro de Interpretacao de Monsanto

Present :

Project Manager (PM), Technician (T), Director of device-importing partner AllAgua (DAA)

K

Two Interlocutors (f)

Five participants

Several other people working at the center interacting occasionally

First phase meeting of the project here in the Visitors Center, meant to create a link with the Lisbon municipality (Câmara municipal de Lisboa, in the following CML) which is supposed to take over the project from autumn on and bring it to other institutions. This is an initiative of the CML.

14:20 I meet PM, T and DAA outside, then three arrived together by car. PM introduces me to DAA, then explains that today is the first meeting here, but the **Center seems very interested in constructing this partnership and have CML take over the concept** of ECH2O Água to reach more institutions.

14:30 we enter, PM introduces us at the help desk, we are asked to wait for our interlocutors. We have a coffee at the vegan eco-friendly cafeteria. Taking advantage of the waiting time I question PM about why they did not use the images of the brochure for the power point presentation of the sessions. **She argues the brochure is addressed to all possible target groups whereas the ppp are adapted every time : APRH considered the epal images easier than one in the brochure illustrating the water cycle, which they think is the most important element to understand for young children.** In the case of the retirement home CCT, the director asked APRH to stress that no waste, medicine, etc. should be flushed down the toilet. → **important to find relating topics !**

14:40 Our interlocutors, two women employed at the center, whom PM was in contact with before arrive, welcome us warmly and apologize for their director's absence; everyone is so busy these days. PM introduces us all.

Ten other people arrive who I suppose will listen to our presentation, our interlocutors explain that they **all work in Monsanto parc mediation, but are not all affiliated to this center** (Centro da Interpretação).

They have already counted the taps within the building where the device shall be installed. T and DAA look at their list. One lady explains that they plan on building teams of two mediators who can later run awareness raising sessions in the ECH2O style within their sectors (5 different freguesias).

T and DAA discuss, PM and I do, the group of Parque Florestal de Monsanto employees do while we all wait for the light being turned on in the amphitheater where our session will take place.

PM informs me that this collaboration was achieved through APRH contacting the CMLs for a partnership, they directed the association to the Visitors Center.

14:50 Only five out of the ten employees do now actually attend the meeting in the Amphitheater. First interlocutor opens the session by presenting us as the APRH team (PM, DAA, T, K) running the project ECH2O, to the representatives of five different freguesias. They will later organize within the Center to pass on the message of the project.

14:53 **PM presents the project's purpose : promoting efficient water use, creating awareness and reducing waste.** Funded by the EU it reaches out to children, adults, retired people. The CML counts among the various partners of the project. Centro Interpretacao de Monsanto will be an experimental

community, meaning that the device imported by AllAgua and certified by ANQIP will be installed all over the center to reduce its daily water use drastically.

PM introduces T and DAA, explains that the demonstration will happen later and that this reduction, illustrated in a percentage of water saved makes it visible and thus works as a mediation tool.

Handing out the leaflet she remarks that it doesn't explain the project but only transmits information about the topic.

14:58 Interlocutors will be available as internal contacts for both: APRH and their working groups, who'll take over the activity.

One man asks how it will go exactly. Interlocutor 1 explains that there is a presentation part that is going to be shown to them in June by APRH, then there is the demonstration part of the faucet aerators being installed. PM takes over, tells about follow up projects : It is difficult to obtain more EU funding to expand the outreach of ECH2O, therefore the CML is now an important partner ! **The executive cooperation is meant to start in autumn, in time for Lisboa Capital Europeia Verde 2020.** Participants agree, this makes sense to them.

15:04 PM asks for permission to take a picture, takes it, all joke around about the need to get personal consent.

15:04 **DAA explains device and why it is convincing : also in terms of costs : the investment is quickly amortized through the water saved, especially for open, well attended public institutions, as their consumption is drastically reduced (~13L->3L/min).** However it is absolutely necessary to make sure people are aware of the need to actively reduce their regular use, even with a device, for example by showering more quickly. The possibility to make a change depends on people's associations to water ? "Boas practicas" have to be taught and shown to integrate them in people's routines.

15:09 Interlocutor 1 says here in the center, the taps are automatic, with sensors, does this change anything ? DAA responds that no, it's important to have it anyways, because it is a mechanical system that saves water in any case.

She quickly explains the internal water cycle of the center, including a "clinica" which retreats used water.

DAA wants to test his device within this existing system, saying that normally it shouldn't affect it in any way other than reducing the actual volume of freshwater used.

15:12 The group now leaves to the washroom on the other side of the corridor to go and see the practical part.

While T (measurement sac, device and tongs) and DAA (whole case of devices and tongs) are getting ready, the group gathers in the washroom and interlocutor 1 explains to everyone, that Monsanto has a big water scarcity problem, even though the CML and EPAL are helping partners. The need to water the parc is on an upward trend.

15:17 **Pointing to his case, DAA explains that there are all kinds of devices for different possible taps.** PM takes pictures.

T asks me to help him with the timing, we do the measurement demonstration. While the water is flowing everyone comes closer to have a better look, make sure this is happening correctly. One participant remarks that the sac has a little hole and loses water, another says this doesn't matter, we still see that it transfers a 10 seconds measurement into a flow of one minute, perfect precision is not needed. T installs, we measure again, all participants obviously impressed by the difference, a reduction

divided by the factor 3: “Imagine this was all around our entire institutions”, “We have to make this spread, it’s urgent”.

One man wants to test the feeling when washing hands, he seems sceptical. When, instead of only one time he has to push the button two times to wash of the soap, **he feels approved in his assumption that it’s not as good as presented. DAA does the maths for him: that is still one third of water saved, and most people push a second time even without the faucet aerator in place because they soap up while the water is already running.** The other man has to admit he was mistaken.



15:30 Still another one who also tested the feeling of the altered water flow and was convinced by it is now investigating the toilet flushes. Questions DAA and T about possibilities to pare water here ? It can have special device, however this is not yet part of the project.

Everyone discusses how and where they could install three teams of two collaborators each, reaching out to schools in their sectors.

T prepares for the installation of the device all over the center, planned for when we’ll be back here for the presentation in June.

When asked about the toilet again he searches for a respective picture of the system on the internet and shows it to the three interested participants, then continues his inventory, checking it up with the list delivered by the interlocutors, for which T thanks them a lot.

Participants waiting in the corridor while DAA and T check on a special children’s and handicapped bathroom where the taps are slightly different. The interlocutors say that it is hardly used, so even if we can’t have it here, it’s no big deal, it won’t change that much anyways. **DAA disagrees : every liter is important.**

15:44 We all go upstairs to the employee’s changing room with a shower : T measures 14L/min in shower. DAA looks for the appropriate device. While installing it in no time, he explains how it aerates the flow.



15:51 T measures again. 8L/ min now. 42% less than before ! DAA illustrates the difference with the example of a four headed family, each showering once a day for five minutes. **In one month, a 42% reduction accounts for 8400-4800=3600L, equaling 3,6 cubic meters of water spared : people are impressed by the significant difference, their eyes wide open.** Then they shyly laugh, admit they might even take longer showers. They agree it is necessary to change, use the device, and also shorten our showers, don't take baths ! All agree.

PM not presenting anything anymore, she only watches. Talks with interlocutor 2.

16:00 T still checking the list, also in the kitchen.

Interlocutor 1 explains the next steps of the cooperation to participants, PM and me. She and her colleague will defend project in CML, and continue to make the link between the mobilized institutions.

16:02 Interlocutors, PM and participants discuss how difficult a functioning internal organization is ; **Everybody is just so busy.** Other projects have already been abandoned for this reason. Therefore we need to have functioning two-people teams and convince the authorities of how important the project is and how effective it can be.

16:07 We all leave for the court, exchange contacts for follow ups and thank each other.

16:15 I leave with APRH-AllAgua Team. PM is concerned if I understood enough, I say I did. On the car we discuss the project's schedule and topics not related to the project (driving in Lisbon, life in Brazil, Algarve, etc.). When T and PM get off at APRH office, DAA gives me a ride to Estrela (15 minutes drive). I take advantage of the situation and ask him about his company's involvement in the project, how useful he thinks it is and what he thinks should be done about water scarcity : He explains that their common partner ANQUIP suggested the cooperation, as AllAgua has never worked with APRH before. AllAgua is not a manufacturer but an import-company, whose Portuguese market is "quite small". Mostly hotels, hospitals, municipalities order these devices. He personally thinks that the price of water is too low to make people recognize how precious it is. He blames the unchanging situation on the government, afraid of losing electors when increasing prices of any essential good, even though this would be the most logical solution, especially because they are essential to life and activity on this planet (he refers to the examples of Denmark and Norway, both richer in resources than Portugal but pricing them higher, with citizens approving it as they have understood how important it is to use them only consciously). The project might still be worth the effort as he considers awareness as the first step to change. He tells me about his other eco-protecting actions, unfortunately he had to give up on his electric car since the infrastructure is insufficient in Portugal (outside Lisbon). Our conversation is very fluent, he doesn't consider me as simply a student but values my participation.

Entrevistas 07/05/2019.

As falas dos entrevistados estão explicitadas na cor verde para facilitar a compreensão da entrevista.

Entrevistado 1 – 07 de maio de 2019 – início 10:46 – duração 13:01

Você se lembra do projeto ECH2O que teve aqui?

- Eu lembrar-me, lembrar-me não me lembro. Se vir eu posso dizer que eu fui aquele que vi, mas assim, dizer, já não me lembro, que eu já tenho 91 anos. Que eu sou já velhota (risos entrevistador) [fala inaudível].

Foi uma apresentação feita mais ou menos há um mês atrás sobre o uso da água...

-A água, sim, sim.

Sim? E sobre colocarem alguns dispositivos no autoclismo e...

-Sim, sim

E na torneira...

-Sim, sim, sim.

Então tá

-Eu no meu autoclismo, já tenho lá uma garrafa de 1,5l de água cheia há muitos anos

Ah, sim?!

-Desde que estou ali naquela casa. Eu estou naquela casa há 17 anos, pois há 17 anos que essa garrafa está cheia d'água no autoclismo. E sabe que eu aproveito muito a água?

É?

-Eu aproveito muito a água. Olha, se eu lavar a minha hortalíça, pra cozer, depois aquela água de lavar a hortalíça, ponho dentro de um balde e esse balde vai para a casa de banho para depois por na sanita quando for preciso. Faço assim.

É, isso é muito inteligente.

-Eu acho que deve ser bom.

Sim, é um bom [interrompida pela senhora]

-Quando acendo meu esquentador para tomar o meu banho, primeiro vem a água fria, não é? E eu ponho uma panela que tenho lá, sabe o que é uma panela?

Sim.

-Bom, ponho uma panela a segurar a água, a segurar a água fria que vem do esquentador, até ela vir quente. E depois então é que eu me sirvo dela na casa de banho pra tomar o meu banhinho. E aquela água que fica na panela já serve pra eu, pra eu aquecer depois quando precisar, para lavar a louça. Já não gasto do esquentador. Eu faço assim.

E a senhora faz isso há anos já então?

-E quando estou a tomar banho, tenho a minha banheira tapada, tapada com coisa no ralo, praquela água ficar, para eu depois por lá algumas peças de roupa que eu durante a semPM vou tirando. As cuecas, as meias, os lenços de me assoar, outras coisas assim que sejam peças minhas, ponho dentro daquela águinha e lavo. E depois passo noutra águinha limpinha e depois estendo. Já é poupar... [conversa entre entrevistado e entrevistador fica com frases uma em cima da outra]

É poupar bastante

-Não é?

Sim, olha, ótimo! (risos do entrevistado)

-Já é poupar bastante!

Então vejo que na vida pessoal...

-Sim...

Você já economiza bastante.

-Por exemplo, os meus dentes, os meus dentes são postiços [conversa prolongada sobre dentes].
Ponho num copo, tiro um bocado d'água da torneira, ponho num copo, e lavo ali os meus dentinhos.
Não estou com a torneira aberta a lavar os dentes. Faço isso. Poupo o mais que posso.

Sim, poupa bastante.

-Além de poupar para o ambiente, também poupa para minha bolsa, que eu não gasto dinheiro (risos entrevistado e entrevistador)

Poupa bastante, é.

-É isso.

Importante essas duas visões, né?

-Sim

Nosso próprio dinheiro e o meio ambiente.

-Sim senhora, eu faço assim. Foi assim que me ensinaram porque, eu quando era miúda, fiquei sem mãe, minha mãe faleceu. E eu fiquei no mundo sem mãe, é, é uma coisa muito triste. E então fui servir pra, pra casa das senhoras conhecidas, e assim, e elas me ensinaram essas coisas, assim, que me tem feito muito bem.

Sim, então é desde miúda?

-Desde miúda, desde miúda. Eu tinha 8 anos quando morreu a minha mãe.

Uau, bem novinha.

[conversa prolongada sobre aprender a ler]

Bom, então a gente já viu que você poupa bastante em casa, né...

-Sim, sim...

Bastante consciência em relação a isso.

-O mais que posso, o mais que posso.

E o que que você achou em relação a aqui? A essa iniciativa de poupar?

-Eu achei muito bem e era bom que as pessoas vissem realmente que, que isso, que é bom para nós e é bom para toda a gente. É bom para todo mundo. É bom.

Pois é. Você acredita que o pessoal aqui teve essa mesma sensação de ou...

-Talvez algumas não tivessem, porque estão acostumadas a gastar muito e não lhe fazem diferença na algibeira, mas a mim faz.

Sim

-Porque aqui eu já não tenho mais ninguém, sou só eu. Recebo uma fraca pensão (tosse entrevistador). Sou viúva e recebo uma pensãozinha do meu marido e minha porque trabalhei e descontei... [conversa prolongada sobre a vida passada dela].

Em relação ao dispositivo que foi colocado na torneira.

-Sim...

Você sentiu diferença? Sentiu menos água?

-Não

Não? Sentiu o mesmo conforto?

-Não senti, não senti nada disso. Só senti que a água quando corre, espalha mais um bocadinho. Pronto, é isso. Mas a água é a mesma.

Sim

-Sim!

Então para você é a mesma coisa?

-Para mim não há problema. Eu gosto de poupar, seja naquilo que for, seja no que for, eu poupo.

E isso é o melhor mesmo. Então, eu acho que por fim [hesitação entrevistador]. Ah, você se interessaria caso tivesse disponível colocar aquele dispositivo na torneira, para ajudar a poupar na sua residência?

-Sim, quando for preciso que eu esteja cá, eu faço isso. Ajudo a fazer.

Ah, não não, mesmo que se fossem colocar na sua residência, você acharia uma boa ideia?

-Ah sim, mas talvez na minha residência não seja preciso porque eu [entrevistador sobrepõe fala do entrevistado], eu faço isso por mim própria. Sim, sim, eu faço isso por mim própria. Eu não sou daquelas pessoas que por exemplo deixa ficar a torneira aberta muito tempo e além disso que a deixe ficar toda aberta. Não, isso não.

Ah, sim, Já tem um cuidado, né?

-Não, não faço isso. E se tenho uma panela ao lume, que faça, porque eu nem sempre como, se faço o meu comerequinho lá, que faço, o lume fica no mínimo. Eu não ponho o lume muito forte.

Sim, porque gasta mais.

-Ponho sempre o lume mais fraquinho

Isso é muito bom.

-É muito bom, não é? (risos entrevistado)

É ótimo para o meio ambiente

-É sim. Mas se for preciso ajudar aqui, eu ajudo. [entrevistador interage com espectador em relação ao comentário, fazem som de afeto e riem]

Oh, isso é ótimo. Obrigada mesmo. E acho que por fim, a última pergunta seria se você chegou a comentar sobre colocarem os dispositivos no autoclismo aqui com outras pessoas.

-Olha, eu vou lhe dizer uma coisa [conversa prolongada], me faz muita impressão a ver tanta luz acesa. Ver por exemplo aqui a casa de banho [entrevistado aponta para o local no momento] e estar aquela luz de fora acesa. Isso aflige-me isso, mas para que? Eu vou e apago a luz e lá dentro faço a mesma coisa. Aquelas luzes que estão assim levantadas, grandes. Pois se é dia, as pessoas estão ali, para que a luz acesa? Eu vou e apago, apago esta, apago aquela.

(risos entrevistador)

Isso é bom.

-Faço sim. E na minha casa faço a mesma coisa. Eu se tenho a luz da cozinha acesa, que é uma luz fluorescente, não tenho as outras luzes, não tenho a da sala, tenho lá a televisão, mas não tem nenhuma luz acesa. Só está a televisão acesa.

Isso é bom. Isso é ótimo.

-Faço assim. E assim vou poupando e vou poupando o ambiente, que o ambiente também precisa ser poupado senão qualquer dia a gente, não sei.

Com certeza, com o futuro incerto.

-Então se for preciso cá estou, está bem? Obrigada.

Obrigada.

Entrevistado 2 – 07 de maio de 2019 – início 10:54 – duração 06:49

[gravação inicia com “então tá bom”, em relação a ela aceitar ser gravada]

Então, a nossa entrevista vai ser em relação aquela apresentaçõzinha da água. Foi... Faz um mês. E eu queria saber o que você ainda se lembra, tudo que foi dito, dos ensinamentos feitos, enfim.

- Ora bem, lembro-me de termos cuidado com as torneiras abertas [fala inaudível].. As meninas falaram... Eu disse, olha, para mim isto não é preciso, porque ainda hoje, eu nunca saio de casa sem apertar as tarraxas e ver se as torneiras estão bem fechadas e o gás, e o gás. Eu tenho 88 anos [fala inaudível] E eu nunca saio de casa sem ver que a torneira está fechada. As vezes fica um pingo sem a gente querer e eu vou outra vez apertar [fala inaudível]. Isso para mim não, porque eu faço isso Já tem uma boa consciência em relação a poupar. Você acredita que foi uma boa apresentação para o pessoal? Para o pessoal ter um pouquinho mais de consciência em relação ao uso da água, que que você achou que fez de influência?

- Eu acho. É preciso a pessoa ter cuidado em gastar a água malgasta, porque há muitas pessoas que lavam a louça, por exemplo, com a água toda a correr. Eu não, eu assim, eu molho a esponja com detergente, da louça né, e ensaboo a louça toda [fala inaudível] para por a escorrer. Torno a fechar a torneira. Eu acho que é assim que se deve fazer. Eu, pelo menos, é assim que faço.

E...

-E também tomar banho. No banho, eu tomo banho de ducha, é de ducha. Eu abro a ducha [fala inaudível] e molho-me toda. E depois ensaboo a cabeça [fala inaudível] Molho a esponja com a água e ponho o detergente, o gel. Me ensaboo toda, me ensaboo toda, me ensaboo toda, fico toda enxaguadinha. Abro o duche, a torneira do duche, fecho outra vez. [fala inaudível] poupar. Porque se eu não poupar, mais gasto, porque eu sou sozinha, eu tenho que pagar. Eu presto contas a ninguém, mas eu tenho que pagar. [fala inaudível]

E em relação aos dispositivos que colocaram aqui, tanto no autoclismo, quanto na torneira. Você gostou? O que você achou? Você chegou a sentir diferença no uso aqui? Como foi para você?

-Não percebo, não estou a perceber.

Ah, não? Com aquela apresentação do mês passado, se lembra? Um dos meninos colocou alguns dispositivos aqui pelo centro, nas torneiras, nos autoclismos. Não sei se você se lembra.

-No dia dos meninos eu não estava cá. Eu não estava aqui.

Ah, não estava aqui.

-Nos meninos eu não estava. Eu estive da parte da manhã, que vocês estiveram. Ou foram vocês ou foram outras. Eu só sei, só estou a perguntar o que se passou. Agora quando junto com os meninos, eu não estava cá.

Ah, mas era só [conversa com entrevistadora 2 para saber o nome do senhor que instalou os dispositivos] o T, não se lembra do Senhor então? Ele apareceu na frente, até teve umas senhoras que falaram que queriam levar o Senhor para casa... Não?

-Não me lembro não. Eu poderia estar, mas nem me lembro.

(risos entrevistador)

Então, tá. Em relação ao, ok.. Você acredita que teve alguma diferença em relação ao consumo aqui, depois daquela, com os seus colegas, depois daquela apresentação?

-Não, acho que não

Não? Sente que ficou a mesma coisa para o pessoal?

-Sim, sim, sim, sim, sim. Ficou a mesma coisa. Lá vai uma ou outra que [fala inaudível] Quem é aqui é na sua casa, quem não é em casa, não é aqui. Pronto. [fala inaudível] lá vai uma ou outra como eu digo [fala inaudível]

Então, você acha que é mais se a pessoa tinha isso dentro dela sim, se não, não.

-Exatamente.

Então, com aquela apresentação foram colocados uns dispositivos nas torneiras e no autoclismo para diminuir a incidência de água, então, diminuir o gasto. E ele ajuda, se eu não me engano, em cerca de 40% de economia nas casas, aonde quer que seja usado.

-Olha, eu bem preciso [fala inaudível] pequenina. Trezentos euros, imagine [conversa sobre as contas que a entrevistadora paga]

Então se você tivesse a oportunidade, você usaria em casa esses dispositivos?

-Se eu tiver... Tenho que ter um controlezinho, pois como algumas pessoas, que quando recebem a reforma, já tem toda ido embora [fala inaudível] E uma pessoa tem que saber controlar. Eu pelo menos sou assim [fala inaudível] Por isso tem que ter um controle, um controlezinho, para saber orientar, para pagar a água, pagar a luz, o aluguer da casa e o comer. Pronto, a gente tem que saber controlar. E eu sei me controlar, sou muito bem controladinha.

Sim, isso é ótimo [conversa entre entrevistadoras]. Então acho que fica por isso mesmo, tá bom?

Obrigada! Obrigada pelo tempo.

-Obrigadinha, beijinho.

Entrevistado 3 – 07 de maio de 2019 – início 11:00 – duração 04:40

Bom, a nossa entrevista é em relação a uma palestra, uma apresentação que teve aqui há um tempinho atrás, que se chama ECH2O Água. Não sei se você se lembra..

-Lembro

O que que você achou desta apresentação?

-Achei bem, porque a gente poupa um bocadinho de água. Um bocadinho bastante, né? Se gasta muita água, imensa água e eu aprendi a poupar também.

É?

-É sim, foi.

Pode dar alguns exemplos? Falar o que você fez de diferente?

-Pois, quando vamos tomar banho fechamos a torneira e nos ensaboamos, não é? E depois lavar a cara é a mesma coisa. E puxar a água no autoclismo também, também acho que resulta. Acho que foi bom. Pouparmos um bocadinho é bom para nós. Por exemplo, né, para os consumidores. É bom.

Ah, legal. Com aquela apresentação foram instalados dispositivos, na torneira, no autoclismo. O que que você achou desses dispositivos? Você achou que fez alguma diferença, se você sente o mesmo conforto?

-Eu acho que, pronto, nota-se já, nota-se na conta da água. A gente poupar um bocadinho de água nota-se logo. Quando é pagamento (risos entrevistado). Eu acho que sim. Foi bom e que foi agradável, ver vocês ensinarem que a gente não sabia poupar água. (risos entrevistador) é é, puxar água, puxar água.

E só, né.

-E só, pois, muito. Eu acho que foi positivo e agradeço vocês porque sei que estão aqui, por virem ensinar.

Ah, que isso (risos entrevistador)

-E agora poupo água, não é.

A senhora mora aqui próximo?

-Não, moro em Queluz.

Ah, mora em Queluz. O que que você acharia se colocassem esse dispositivo na torneira na sua casa? Ia gostar?

-Sim, mas acho que se comprar aquela quantidade..

É, é mais sobre uma percepção se você gostou ou achou interessante

-Gostei, gostei.

É, então você usaria se tivesse a oportunidade.

-Gostei, gostei bastante.

Ah, legal. Depois da apresentação, você chegou a falar com alguém fora do centro a respeito?

-Não, só com meus filhos em casa.

Ah, com seus filhos? Então já são outras pessoas. Então, comentou sobre?

-Sim sim. [fala inaudível] e ensinaram a poupar água no centro de dia. E estamos contentes e satisfeitos, não é? Porque qualquer coisa que se poupar, é bom, não é?

Com certeza. Sim.

-É tão essencial à vida e é tudo

Sim. Não é só questão dinheiro, né, é questão...

-Não se pode estragar a água de maneira nenhuma.

Bom, muito bom saber isso! Bom saber que fez um efeito positivo essa apresentação.

-Sim, bem positivo.

[conversa entre entrevistadores para saber se deveriam fazer mais perguntas]

Você acredita que seus colegas aceitaram bem ou você acha que eles não sentiram a diferença?

-Sim sim, aceitaram. Mesmo aqui, aceitaram muito bem. Que já não se gasta tanta água. As pessoas gastam muita água, não é, aqui. As pessoas (risos entrevistado) não vêm educadas de casa, não estão habituadas a poupar. [fala inaudível]

É, isso é verdade.

-Pois é, é assim. E obrigada, mais uma vez.

Que isso, obrigada você pelo tempo.

Entrevistado 4 – 07 de maio de 2019 – início 11:05 – duração 04:53

A gente queria saber o que você se lembra, o que você tirou de interessante em relação daquela apresentação do projeto.

- Sim aquela história de estarmos a reduzir, a poupar a água, isso é a parte principal. Já comprei aquelas peçazinhas pra por..

Ah já?

- É, comprei logo.

Olha, que legal.

- Tive uma experiência, e claro. Agora quero ver a fatura da água.

Ah sim (risos entrevistador)

- Depende da fatura da água, mas pronto. Eu acho bem. Temos que poupar bastante água. E o principal também é [fala inaudível].

Você sente alguma diferença no seu conforto com aquele dispositivo ou acredita que esta o mesmo conforto em usar a água?

-É assim, no banheiro, como gosto, enquanto eu puder quero é estar na banheira, relaxar e essas coisas. Mas no duche acho que a água corta e daí fica a água fria, eu gosto da água quentinha. E tem que esperar novamente que ela vir, se não é a única coisa que vejo quando fazemos, quando estamos a tomar duche é corta, a água vem fria.

Ah entendi, então sente um pouquinho a diferença.

-Essa, noto essa diferença. Mas como eu gosto mais e tomar banho de banheira do que estar no chuveiro, enquanto eu puder quero banheira.

Entendi. E em relação ao projeto, você gostou da ideia que foi transmitida? Acha que serviu para ensinar as pessoas? Você acha que fez algum efeito aqui?

- Não posso falar se serviu ou não serviu, mas foi um projeto pra esclarecer bem pras pessoas, isso sim. Mas se fizeram caso a esse aspecto não sei. Pras suas casas não sei como é que é.

Ah sim.

-Eu fiz logo. Fiz logo a diferença. Agora vamos ver a fatura da água. É única coisa que vejo depois. Sim, entendi. E o quão importante considera poupar água? Em todos os termos, seja...

- Tens que poupar água que [fala inaudível] barragens estão a ficar vazias, então temos mesmo é que não desperdiçar água. Sempre.

Sim, com certeza. E antes da apresentação, você acredita que você já fazia algumas coisas para poupar água em casa ou que foi mais depois da apresentação?

- Não, não. Eu tenho o cuidado de poupar porque a despesa vem na fatura. Tanto poupar na água, quanto poupar no gás. [fala inaudível] É assim, não gosto de estar as escuras.

Ah sim, entendi.

- Mas pronto, evito de o mais que posso. E estar a escuras não, eu tenho que ter luz.

E você chegou a comentar sobre esse assunto da apresentação fora do centro?

- Falei com o meu genro, com os meus filhos. Meu genro também pôs nas torneiras dele.

Isso é muito bom.

- Sim, da maneira como temos o planeta.

Sim, o máximo que da pra fazer

- E a via de fazer outras companhas que também faziam falta, sobre os plásticos e isso tudo.

Bom, então acho que é isso.

- Pronto.

Rapidinho, sem dores. Obrigada.

Entrevistado 5 – 07 de maio de 2019 – início 11:35 – duração 10:35

É então, você se lembra do projeto ECHOÁGUA? Pode me falar um pouquinho sobre o que você extraiu daquele dia?

- Que nós cada vez mais temos que poupar água. Como a água vai acabar um dia não há água mesmo, a água que podemos beber. [fala inaudível] E que já está mais que na hora de nós começarmos a olhar com outros olhos pra este bem que nós temos. E começar pela poupança em casa, evitar de.. mesmo nós que no nosso dia a dia quando vamos passear a sei lá, [fala inaudível] Por exemplo eu sou de uma aldeia que tem um rio. E aquilo mandam tudo pra lá pra dentro. E agora as pessoas já começam e se mandam. Ah isso não faz mal, a gente manda. Só que não vai e as coisas ficam. E acho que essa sensibilização cada vez tem que ser mais. Mesmo os mais novos já são diferentes. Mesmo assim não ligam muito para esse problema da água. [fala inaudível] É complicado, mas acho bem que hajam muitas sensibilizações, ações e que comecemos a olhar para a água de outra maneira.

Então foi uma boa apresentação?

- Foi, foi, foi.

Ótimo. E o que você achou em relação ao dispositivo que colocaram aqui no centro? Viu diferença? Sentiu diferença no seu conforto?

- Do autoclismo não notei diferença, sinceramente. [fala inaudível] Aquelas coisinhas da torneira a princípio saímos de lá com a patinha toda salpicada, saímos de lá todas molhadas. Porque aquilo parece um chuveirinho, não é? Aquele chuveirinho fica diferente e quando estamos a lavar as mãos, que é aonde sinto mais, parece que aquilo custa mais a sair a espuma. Foi o que nós achamos, parece que a gente tem que esfregar mais pra sair. Mas agora, nota-se que se poupa. Não, isso nota. Aliás quando fizeram aquilo com o saco de por [fala inaudível] nota-se que poupa imenso.

Ok então. Legal. E você colocaria alguma coisa do tipo na sua casa?

- Em minha casa não sei. Não porque também já poupo. Já poupo pela fatura da água. Poupo mesmo já o autoclismo, pois o meu já tem aquelas duas ... o mais ou menos não é? E muitas vezes além disso quando estou só a fazer xixi não descarrego aquilo tudo. Não deixo descarregar aquilo e poupo. Nas máquinas, não lavo a roupa só com uma peça ou duas. Tento encher aquilo, já poupo. Mas não estou a ver a colocar aquela coisinha na torneira. Não sei..

Acredita que adotou alguma estratégia diferente para poupar água depois daquela apresentação ou não? Era mais o que você já fazia?

- Não porque eu já faço mesmo. [fala inaudível] (história sobre colocar um bacalhau no autoclisma). Nós quando tomamos banho no duche, havia de haver formas que a água ao viés de ir, tipo os autoclismos, porque é água que não faz mal, só com espuma. [fala inaudível]. Há tantas técnicas que não é só nós em casa a poupar, eu acho que... aí poupava-se muito mais.

Sim, com certeza.

- [fala inaudível]. Canalizar essa água da chuva para depósitos para depois regar a relva, as flores todinhas. Porque eu sou de uma aldeia, e durante anos e anos se bebia a água da chuva. (História sobre o pai da entrevistada na aldeia). E agora cada vez mais temos que poupar água.

Sim, muito interessante.

- A água da rede pública eu acho que é um desperdício regar flores. Porque tem que ser água boa pra regar as coitadinhas das flores. Mas arranjar outras técnicas. Porque nós em casa a poupar é uma coisinha mínima. Tá bem, já faz diferença, mas acaba por ser mínimo.

Tem que haver uma conscientização de todo mundo.

- É. Ajuda, mas... eu própria as vezes vejo nas notícias.. [fala inaudível] Isto é bom mas havia de começar por cima. Nós a poupar água aquilo é muito interessante, além de ficar toda molhada é interessante, (risos entrevistador) mas é ficar de hipocrisia, pois o estado, quem gere todos os recursos hídricos não está nem aí ou não está como deveria estar.

É, a ideia é que esse projeto também, quem sabe, atinja o pessoal mais rápido, que vê que faz diferença. E você acredita que os senhores que viram a apresentação, você acha que fez alguma diferença pra eles? Você viu se eles comentaram entre eles e se foi uma conversa que continuou depois?

- Nos aqui temos pessoal que não perceberam nada mesmo. Porque não ouvem e foram lá a casa de banho, mas nem se aperceberam. E ainda temos aqui pessoas que realmente comentaram sobre isso e outras até disseram “vou por isso em casa”. Comentaram e queixaram bem que poupassem. Ali na sala falaram nisso. Foi um meio meio. Nós aqui temos pessoas que já não.. mas pronto. Quem ainda vive em casa sozinho, esses falaram. E acharam bem [fala inaudível]. E as pessoas na maioria estão a favor dessas poupanças, preservarmos a natureza, mas depois acabam por.. é que nós aqui temos pessoas que mesmo.. que já não.

É, não tem porque complicar muito.

- Há pessoas já com demência eles não se apercebem, já não se lembravam. Meia dúzia de pessoas sim, sim senhora. Acharam bem aquela torneirinha (risos entrevistador). É, mas pronto.

Então eu acho que seria mais isso mesmo. Bem interessante os contos, diferentes. Obrigada.

Entrevistado 6 – 07 de maio de 2019 – início 12:01 – duração 16:12

Estamos aqui para fazer uma entrevista sobre a apresentação que teve a um tempinho atrás sobre o projeto da água.

- Isso, eu não sei se puseram lá em cima nos apartamentos nas torneiras. Mas no autoclismo está. Não porque não estava lá e não vi. Mas não sei se puseram nas torneiras. Nessas torneiras aqui acho que puderam. Acho que lá em cima tá normal.

O T era pra ter colocado nas de cima, a gente vai ter que ver...

- Porque aqui as torneiras ao deitarem água, deitam tipo um chuveiro, não é?

Sim, isso.

- Lá em cima não há isso. É normal. Lá em cima não devem ter posto.

Ok.

- Agora no autoclismo é que eu achei logo a diferença. Deita muito menos e eu acho isso muito bem. Mas você vê que fez uma diferença ruim ou você acha que o autoclismo funciona normal?

- Sim, para o que estava, tá bom. [fala inaudível]. A gente nota logo a diferença. Agora nas torneiras não sei. Acho que estão na mesmo conforme o que estavam. Eu já moro cá a cinco anos e as torneiras já acho que lá em cima não puseram, só puseram cá embaixo. As torneiras cá embaixo deitam como se fossem um chuveiro e lá em cima não.

Entendi. E quando você usa as aqui de baixo você..

- Nota-se a diferença.

Nota?

- Nota-se a diferença.

Mas você não se importa em usar?

- Não. É melhor. [fala inaudível].

Então no geral você gostou dos dispositivos instalados?

- Sim, sim.

O problema é que foi comentado é que poderia diminuir a qualidade né. Na hora de lavar a mão e de usar o autoclismo, mas então você não sentiu uma diferença?

- Sim, sim. Nos autoclismos nota-se diferença. Tanto lá cima quanto cá embaixo nota-se a diferença. E as torneiras, eu noto que é quase a mesma coisa como estava. [fala inaudível].

E em relação a apresentação em si. O que que você achou? Gostou?

- Eu gosto dessa maneira.

Quais foram as ideias que você tirou de lá? As principais.

- [fala inaudível]. Uso a máquina de costura lá em cima a noite.

Pode falar um pouquinho sobre o que você obteve daquela apresentação da água?

- Eu gostei.

Gostou? Achou que fez alguma diferença em como você usa a água? Você já fazia alguma coisa pra economizar água antes da apresentação?

- Sim. Eu, quer dizer, não quer dizer que porque estamos aqui que vamos gastar assim à toa. Né, a gente podendo economizar, é como fazer em minha casa, é a mesma coisa. Porque aqui que é a minha casa agora. [fala inaudível]. Tem que se ter cuidado, eu já estou a caminho dos 70, tem que se ter cuidado. [fala inaudível]. Eu acho que pra mim, esses apartamentos deviam ter só um aquecimento, eu pra mim tenho só um quarto que ocupa essa parte toda e tenho um que é metade na casa de banho. [fala inaudível].

Você acredita que os seus colegas tiveram essa consciência também?

- Não.

Você acha que mudou alguma coisa depois daquela apresentação ou eles continuam gastando?

- Olha, não sei. Porque eu não vou pra casa de ninguém. Eu me meto ali no meu cantinho, eu moro ali no primeiro andar.

Ah mas de conversa, você sente que teve alguma diferença ou não fez muito efeito?

- Sim, eu já tinha ouvido dizer que sim. Acham diferença nas torneiras e tudo. Eu acho que sim. [fala inaudível].

E você gostaria de um no seu apartamento, se pudesse ter o torneira?

- Sim, sim.

Com certeza, ok.

- Eu acho que se pusessem nos apartamentos todos, acho que sim. [fala inaudível]. A senhora da limpeza as vezes apanha as águas das torneiras abertas. Por que? As pessoas são um cadinho complicado. Eu faço como fazia na minha casa. Acho que aqui as vezes é um exagero.

O que que você acha que foi o propósito ou o resultado daquela apresentação que foi da água?

- Eu acho que aquela apresentação foi muito boa.

Foi? Te ensinou o que assim? Fale alguns pontos que você se lembra que achou muito giro que as senhoras falaram.

- Elas falaram muito bem. Gostei.

E o que que você acha em relação a jogar medicamentos na sanita?

- Ah eu não acho bem. Acho que as pessoas se vê que já não tomam aquela medicação, juntam, metem dentro de um saquinho e vão entregar. Muito mais fácil.

Sim.

- E eu não deito o medicamento. [fala inaudível]. Por mim acho tudo bom o que fizeram. Acho muito bom.

É uma iniciativa pra tentar né.

- Eu acho que quando abro aquela torneira ali parece um chuveirinho. Tao engraçado. (risos entrevistador) É melhor aquilo assim. [fala inaudível].

E o outro pessoal que mora aqui, você acha que eles têm essa percepção?

- Não, eles não percebem. [fala inaudível].

A quanto tempo a senhora mora aqui?

- Moro aqui a cinco anos.

Você já tinha visto antes algum tipo de intervenção assim? Pra poupar água e energia, ou foi a primeira vez?

- Não, primeira vez.

Então é a primeira vez.

- Não sei se já fizeram [fala inaudível].

Então é isso.

- Pronto. Gostei muito da simpática que estiveram cá.

Foi um bom momento então a apresentação?

- Muito boa.

Então tá bom, ótimo. Bom saber. Muito obrigada.

- Obrigada vocês e um bom trabalho para as meninas.

Obrigada e bom dia.

Entrevistado 7 – 07 de maio de 2019 – início 12:17 – duração 07:43

So, do you work here, right?

- Yes.

Ok. So, what is your position? Do you take care of people living here?

- Eu sou educadora social.

Ok.

- É tipo um pouco parecido com assistente social, mas sou educadora social.

For how long have you been working here?

- 20 years.

(risos entrevistador) Você acha que os senhores, os moradores, eles já tinham essa percepção de economizar água?

- Sim, sim, sim. Mais do que propriamente as pessoas mais novas. Porque foram pessoas que foram habituadas desde o início a poupar muito. Porque viveram em outros tempos e era difícil a vida em Portugal, e então eles eram obrigados a poupar.

Interessante. A vida era bem difícil aqui antigamente?

- Sim.

Então é por isso. E você acha que teve alguma mudança da apresentação da ECHO? Você acha que teve algum impacto?

- Não faço ideia. Sério, sou sincera, não faço ideia. Para nós sim, que assistimos, para os funcionários, sim, sim. Notamos a pressão da água que aquilo acaba por reduzir o caudal. Agora em relação a eles, não faço ideia.

Você gostou?

- Sim, sim, gostei imenso. [fala inaudível].

A idade média do pessoal que a gente entrevistou? Eu sei que a primeira senhora tinha 91 anos. 81 ...

- E outra tem 70 e poucos. Uma tem 79. Uma tem 84. Foram essas. Agora não sei com quem falaram. [fala inaudível].

Bom saber. Você acha que o pessoal leu? Que eles receberam o kitzinho com garrafinha.

- A garrafinha utilizam muito bem, todos. E isto aqui não sei se leram, mas as garrafas sim. Eles queriam mais, todos tem as garrafas com eles.

Ok. O que você acredita que poderia ser um pouquinho melhor ou fazer de diferente do pessoal da apresentação? Se teriam outras maneiras de abordar...

- Não, eu acho que foi bastante elucidativa. Quem explicou, explicou bem, de forma clara e concisa, direta, básica. Que as vezes sobretudo é com essas pessoas, é importante as vezes falarmos de uma forma básica para que eles consigam perceber. E acho que isso foi a mensagem bem transmitida para todos. E o fato de terem ido com eles a casa de banho mostrar como funciona, foi muito bom para eles.

Ok. Então, muito obrigada. (risos entrevistador).

As falas da entrevistada está explicitada na cor laranja para facilitar a compreensão da entrevista.

Entrevista com a Diretora do Centro Comunitário de Telheiras – 16/05/2019 – início 10:30h – duração 19:51min.

As académicas chegaram ao Lar de Telheiras no horário agendado e foram recebidas com muita simpatia pela entrevistada [nome], diretora da unidade de desenvolvimento e intervenção de proximidade alta de Lisboa, que lhes pediu para esperarem alguns momentos na sala de convívio dos séniores. Em seguida [diretora] as acompanhou para sua sala e imediatamente adiantou que a entrevista teria de ser breve pois ela tinha outros compromissos em seguida. Antes de iniciar o questionário a entrevistadora pediu permissão para realizar a gravação em áudio e [diretora] concordou.

Considera que a apresentação feita sobre o projeto Ech2o Água era adaptada para o grupo alvo (séniores)?

-Eu acho que foi sobretudo a parte prática.

Eles gostaram de ver os dispositivos?

-É, muito. O facto de terem percebido e até na linha de nós querermos e gostarmos que eles possam usar estes dispositivos em casa. Acho que o facto de eles verem que era muito fácil adaptarem, acho que essa parte foi muito importante.

Eu tenho sempre muitas dúvidas das apresentações com o grupo todo. Porque há pessoas que não ouvem, há pessoas que não tem o mesmo tipo de compreensão. Então acho que determinadas sensibilizações e informações eu acho que é melhor fazerem em pequenos grupos.

Isto poderia ser um ponto a ser melhorado?

(entrevistada assentiu com a cabeça positivamente)

Os idosos comentaram sobre a intervenção depois da apresentação?

- Comigo pessoalmente não, não sei.

E entre eles? Com o pessoal que trabalha aqui?

- Isto tens que perguntar ao pessoal. Comigo eles não têm comentado. Nós entre nós aqui da equipa comentamos. Nunca houve nenhum que tivesse comentado qualquer coisa como não está bom ou não chega.

Você acha que eles gostaram de intervenção com a apresentação e os dispositivos?

- Da parte prática gostaram, adoraram sim.

Reclamaram sobre estar perdendo água?

- Não, não. É isto que eu estou a dizer, não houve nenhuma reclamação. Não vieram dizer “ah que extraordinário”, mas ninguém veio dizer “ai que maçada, ai que não dá, ai que isto é pouco”. Não. Eles já tinham demonstrado alguma preocupação com o tema (salvar água) anteriormente?

- Não.

Nunca?

- Não.

Nem passava pela cabeça deles?

- Eu acho que eles têm preocupação de salvar a água como problema ambiental ou do planeta, não. Mostram muita preocupação em relação ao consumo, sim. E queixam-se muito e muitas vezes que, mas isto é cadinho mais dessa idade, que é a fatia do consumo não é muito grande. Mas, pois, tem muitos impostos e taxas. Eles têm uma preocupação económica, não me parece que seja uma preocupação ambiental.

E a percepção deles mudou? Como? Porquê?

- Pois, não tenho uma certeza que a percepção a nível de problema ambiental. Não lhe sei responder. Fomos informadas que foi pedido que na apresentação se falasse algo sobre jogar medicamentos na sanita. Isto acontece bastante? Porquê foi pedido?

-Quem pediu isto?

No dia da apresentação foi a [PM]. Pediu para explicar para eles que isso não poderia ser feito.

- É sim, cá em Portugal ainda há muitas pessoas que atiram muitas coisas na sanita. Não é só medicamento. É medicamento, beatas, objetos e ainda é um cadinho visto como caixote de lixo. E isto eu acho que é sempre importante falar se é feio. E não é só com eles, é com todas as idades. Eu acho que é muito importante referir isso. Mesmo por exemplo, óleos.

Quando se está a lavar a loiça, os óleos que se deitam na (faz mimica de pia), isto é uma coisa que acho que quase todas as pessoas fazem. Tanto isso ainda há muito trabalho a fazer independentemente deles. Eles por exemplo, eu costumo dizer que há muita coisa que nós temos que aprender com eles a nível de consumirmos menos, de aproveitarmos mais. Acho que eles viveram esta geração, grandes dificuldades. E como tal, não tem aquela mentalidade de consumo e de esbanjar como a minha e ainda muito mais a vossa.

E aí temos muito a aprender com eles, nós é que temos vários projetos de sustentabilidade e ainda o ano passado quando eu falava com eles dos sacos de pano, para não se utilizarem os sacos plásticos. Isto para eles é uma coisa normal. No dia seguinte houve imensa gente que me trouxe sacos que usavam, sacos que faziam, este era para o pão, aquele era para o feijão. E, portanto, a esse nível sabem muita costura, fazem roupas para elas. E esta coisa que falamos agora da eco-costura, era uma coisa que não havia dinheiro e, portanto, fazia-se.

Neste aspecto há muito que temos que trabalhar com os mais novos e com eles não. Com eles, eu acho que há muito a trabalhar, e no outro dia a Câmara veio cá fazer uma sensibilização também sobre isso, que eles não estão muito habituados por exemplo, é na separação dos lixos.

É uma novidade para eles?

- Isto é uma novidade para eles. Nós aqui por exemplo temos a separação e tem sido difícil eles integrarem aquilo. Põe papel no amarelo, papel plástico no azul, aquilo passamos a vida a fazer ações e sensibilização e a explicar individualmente.

A água também era uma coisa que eles não estavam sensibilizados. Não tínhamos esse problema da água a 70 anos, portanto, é efetivamente uma novidade e eu acho que é uma coisa que é importante eles terem consciência. Para mim, eu acho que é mais importante isto que você estava a falar e que a [PM] disse, não deitar os óleos nem medicamentos e tudo que não se deve fazer para poluir a água. De consumo eu acho que eles têm pouco, porque são muito poupados porque tem pouco dinheiro e porque são muito atentos a essas coisas. Não deixam as luzes acessas, não deixam as águas abertas por um problema cultural, educacional, geracional e também económico.

Tínhamos ainda duas perguntas sobre o depósito de medicamentos na sanita (Fazem isto regularmente? Como reagem?), mas decidimos não as realizar pois a entrevistada não se mostrou muito confortável com este assunto quando foi abordada anteriormente no início da questão 07.

Você acredita que este projeto pode causar algum impacto na sociedade? Não somente aqui com o centro, mas na sociedade em geral?

-**Eu acho (assente com a cabeça positivamente). Eu acho este projeto fantástico.** Eu não conhecia estes dispositivos e estou mortinha por ter em minha casa. Tenho falado nisso a toda a gente e não sei como isto não apareceu a mais tempo, não sei como isto não é mais fácil. Tenho perguntado muito a [diretora da APRH] onde é que se pode comprar.

Nós gostávamos aqui, na parceria local de Telheiras tem um centro de recursos, um centro onde há vários materiais que a população pode recorrer numa linha de economia circular e de partilha. Não precisamos todos ter variadíssimas coisas e que podemos circular e partilhar. Nomeadamente temos alguns produtos para diminuir o consumo excessivo de plástico, copos de plástico reutilizáveis, pratos e isso tudo. De maneira a que a população também da uma festa ou um evento e pode ir lá buscar. E gostaríamos de ter esses dispositivos para as pessoas experimentarem e depois poderem comprar, mas ainda não consegui que me dissessem onde que facilmente estes dispositivos podem ser comprados. E isso eu não percebo.

O que poderia ser melhorado?

- Onde é que se comercializa este dispositivo. Que nós amanhã começamos a ter no Centro de Recursos, e eu não acredito que as pessoas depois de verem o que isto pode diminuir numa comunidade como esta, que é uma comunidade com bastante poder de compra, mas com algumas preocupações ambientais. Eu acho que seria uma coisa muito positiva e as pessoas pudessem comparar. Porque ainda por cima deve ser barato. E eu penso que as pessoas mesmo que não notem muito no consumo, que não seja muito significativo no fim do mês, eu acho que as pessoas só por terem a ideia que estão a ter um comportamento responsável, usariam.

A segunda entrevistadora faz algumas perguntas em inglês e a entrevistada responde em português:

Do you have precise suggestions on how to adapt the presentation? **Because if got that right, you said it was not very interesting for your people to see the presentation, but only the demonstration when he put in the device.**

- Não, eu acho que a apresentação também foi interessante, o que eu acho, e que não é só na vossa, é que nós temos um tipo de pessoas, por exemplo era isso que eu estava a lhe dizer a um bocadinho, há umas que não ouvem bem. Obviamente que uma apresentação que já é feita a não sei, deviam estar 30 e tal a 40 pessoas, é difícil mesmo para focar a atenção. É muito diferente se estivermos a fazer uma apresentação para 10 pessoas ou para 40.

Eu achei a apresentação muito interessante e o ritmo e o que foi passado. Continuo a achar é que em pequenos grupos tem mais impacto. Não é que a apresentação não tenha sido interessante.

But was in general maybe too long?

- Não, não acho. Acho que ela teve um tempo muito (faz giros com a cabeça). Talvez, mas lá está, também deviam ser menos [pessoas] para que pudesse ser mais participativa. Se eles pudessem fazer perguntas, falarem um cadinho como é na casa deles, mantem mais a atenção do que ser só o dispositivo.

Is there a way in which they could have more participation? Because there were only a few people talking when questions were asked, so maybe how could we achieve that everyone gets involved?

- Com grupos mais pequenos. E eventualmente até com algumas dinâmicas, alguns jogos. Porque a muitas pessoas, e isso não tem a ver com a idade, não gostam de se expor em grandes grupos. Aqui ainda mais, temos pessoas com algum grau de demência, temos pessoas que não ouvem, temos pessoas inseguras num grupo de 30. Mas isso é em tudo, você vai a um encontro e podem lá estar quinhentos licenciados e nem toda a gente gosta de dar a cara. Quanto mais o grupo for pequeno e quanto mais a sensibilização for dinâmica mais as pessoas participam.

Isso não tem só a ver com a idade, não é? Todos nós sentimos mais confortáveis dependendo da nossa personalidade, há pessoas que sentem muitíssimo a vontade de falar a quinhentas pessoas e há outras que tem ali um número que é partir do qual já não se sentem confortáveis.

Why did you participate in the first place? Why did you invited them to come?

- Eu conheço a [diretora da APRH], daqui do bairro e ela já participou em algumas atividades nossas e eu já lhe tinha feito várias vezes, perguntado a opinião dela como morador aqui do bairro, de que

projeto que ela achava que seria interessante de se fazer aqui. Ela sabia que a parceria local estava a trabalhar problemas da sustentabilidade ambiental e, portanto, foi ela que nos convidou, e ainda bem, a participar do projeto. E ela estava com muita vontade, pelo o que eu percebi, de experimentar em centros dia e escolas para também poderem intervir em várias faixas etárias. E, portanto, eu acho que isto tem muito a ver com a ligação dela ao território e com a ligação dela também a nós e a parceria também tendo em conta que trabalhamos essas problemáticas.

9 - Thursday, May, 30th - 10am - Collective Drawing and 2nd Session at Escola Básica de Lumiar, Alto da Faia

9:00 Our research group (three people : K, P and C) arrive and meet in front of the school's main entrance where many children arrive at the moment, mostly accompanied by their parents who are ready to head off to work directly. We present ourselves at the door and wait for the HM to receive us.



Entry hall : ECH2O-Água flag and plastic waste project.

9:10 She leads us to her office but needs to finish discussing with the council and some kids before having time for our scheduled interview (agreed on beforehand, by email). Our research group waits for her in the office. We discuss our questions again, we have to reduce it to the most important points which are : if the presentation was well received in the institution, if the school passed on the information received by ECH2O-Água to other groups (parents, town council, ...), if the presentation was well adapted to the children, why the school decided to participate in the project, if she thinks that the children understood ?

9:25 PM arrives with an entire bag of communication material, but it is not meant for the school.

9:30 HM arrives, closes the door behind her and P starts conversation, PM stays with us. We sit around HM's L-shaped desk, she is sitting behind as last time. Three of us take notes as she doesn't want to have our conversation to be recorded (she lives not connected).

PM intervenes regularly during the interview. We feel like HM is not speaking honestly and freely about her impressions on the project, due to PM's presence. HM claims to have appreciated the project and its approach to the children a lot. Lying in the responsibility of the teachers, the session

was prepared. Everyone has been informed about it beforehand and the water topic was treated beforehand with the kids, in the context of nature preservation. The school participates and runs a lot of projects in this field.

9:42 HM stands up, organizes another interview for us, with a teacher. PM stays with us.

9:44 D arrives, apologizes for being late. She also interferes with P's questions and HM's answers. When asking about the outreach of the project within the school's entourage, D explains that APRH can consider contacting the parent's council to share the info on resource preservation with them.

9:46 teacher arrives, she's on the phone. She did not assist the session on April, 30th, asks what happened. P explains that there was a presentation of the water cycle and a demonstration of the installation of faucet aerators. She knows about the devices, the kids sometimes stand in a line just to use only the tap that has it. She says that most of the time the kids here care about the environment but don't link their action to it, that's why she considers the project to be important and interesting. D interferes and explains that session 2 is very important for feedback and spread of knowledge. She explains in a relatively dry tone, that before the preparatory meeting we had with PM, P and HM in the beginning of April, the association already presented the project to the school before. In total there were four preparatory meetings prior to the first session. Now D is thinking about another session with the parents.

Our interview situation is disturbed by this multi-actor constellation and the open door. Another person comes in to look for the HM who hasn't returned yet.

9:58 teacher leaves, and we all go outside to the court, for the drawing session. PM carries the material



10:06 10 Kids (5-10 years old) arrive dressed with project T-shirts and each carrying a notebook of the project, accompanied by one staff lady. The smaller kids seem tired. All of them are very calm and waiting for what is going to happen.

10:10 The kids wait, surprisingly the project team doesn't talk to them very much. In contrast to what we expected, **they don't introduce themselves referring to the session** the kids attended four weeks ago. There is **hardly any interaction but "hello" and taking a group picture. HM animates the group**, talks to the kids in a funny way, project team prepares the canvas for the drawing.



10:14 D tells we're almost ready. Now asks everyone to participate in the activity. They put the project notebooks away and come closer around the canvas. D asks kids for their names and introduces us all with surnames, too. **However, she doesn't relate us to the project and last session.** Nonetheless, she talks about water, that it is everywhere.

10:17 PM takes over the activity and hands out A5 prints with elements of the water cycle. **The paper is very thin. Would be easier with laminated cards ! Reusable !** PM asks who has what element ? They name it (it's written and illustrated on the little sheet) and then each start drawing their element on the canvas. Kids listen, do not talk too much.



10:20 Three of them directly start drawing (sun, flowers and houses). PM asks others to add pretty elements: plants, flowers, etc.

HM comments "que lindo", D then, also, PM and D hand out more elements, asks who wants to draw which one ? Now the kids respond ! "Rio !!", "As casas !!", "Mar é muito importante !!" They gather around the canvas and draw. D reminds them to organize the space they have, it should be one big entity in the end, not fragmented elements.



The kids don't stick to the image on the card but use their memory and imagination to draw, most out the card away before starting to draw.

10:26 P interviews staff lady. She even prefers the feeling of the running water through the faucet aerator, finds it convenient. She also tells about the kids lining up to use the tap with the device instead of those without it.



10:28. The kids work on their own, autonomically. Every now and then PM asks them to add more little houses, more flowers, etc. and suggests to add a bridge to the river.

Surprisingly, the connection between the elements is not discussed or even addressed by the project team. They mostly observe how the children draw.

10:30 One kid asks PM for color advice. She indicates one and then suggests to the group to add animals, but without further explaining why (because they also need water to live/depend on the resource).

HM stays all the time with us. **Watches the activity but doesn't interfere, but for telling the kids occasionally that they are doing a great job. The kids enjoy getting this positive feedback from her.**

10:31 Staff lady helps the kids when they are unsure about how to realise their part of the picture. **They're very dedicated ! PM watches, takes pictures and asks if they like it ?** She tells to the group : You forgot the rain in the mountains !

The colors (pastels) used are not really adapted, they detach. But PM is prepared and brought wet tissues to clean hands : how does this fit the water saving strategy ?

First phase of the picture were natural elements.

D adds canalisations and water taps as elements : where can you find those ? She explains that canalisations are linked to the river and sea. Taps are to be found in houses.

Most kids are concentrated on drawing. Now they ask questions when they have : how can this fit in here ?

Second phase of the picture are **man made elements that have to be fitted into this existing environment. For these elements the kids tend to keep the card with the picture close.**

HM asks kids who don't draw at the moment which element was theirs. She and other staff lady suggests to each of them to add something in order to **make them participate** again, e.g. oh but doesn't your house have more windows ?

When asked to add agriculture they think of both : plant based food and farm animals.

10:47 D resumes what is in the canvas : nature, taps, pipes.

Amongst themselves, the kids discuss very little. They focus on drawing. They color everything.

Next to our session other kids have a biking class in the court.

HM and teacher discuss how to fix the pastel colors on the canvas to be able to keep it in the school.

They session is very calm and peaceful. Teacher and HM congratulate the kids in their drawings.



10:53 Group picture with finished picture: it's all about communication. The two girls who shall not be photographed hide behind the picture.

10:56 we clap "muito bem, bom trabalho !"

P of our research group asks one boy who holds the picture where he situated water in the picture ? Neither PM nor D, T or HM participate.

10:58 kids take their notebooks and get ready to go back inside.

11:00 Break : we leave to the inside with the kids. The **technician is here**. He and D discuss what happens next : the second demonstration in the washroom. The kids shall take notes here, that's why they got the **notebooks : communication material is integrated in activity here!**



11:04 All in washroom. **Kids gather around sinks and technician who takes out the device and shows it to the group. He asks them if they liked the way the water flow feels ? They do not react much even though we know from their teachers that they like it.**

What do you need to do when a tap leaks ? No answer. Teacher asks one boy directly : is your tap at home in the bathroom okay ? Yes ! Another kid ? Yes !

T asks about flushes. Teacher tries if the one here works properly ? T and teacher try to relate what we talk about to the kid's daily reality. D explains that we will see now : the demonstration of how the device is put onto the tap again. **The kids take notes : D : "just like in a laboratory". Teacher notes for the younger ones ! Each kid has notes in the end ! Elder kids note in entire sentences.**



T: Now we will put a sheet on the mirror where you should make a little cross whenever you use the tap. This helps to quantify the water use. **This involvement in the actual measurement process is a step towards citizen or participatory science.**

Now T and D explain that the water coming out the tap originally comes from the river and is sent here through pipes.

11:13 kids close their notebooks and get ready to leave. P and T discuss which part of the project this demonstration is part of. Two girls compare their notes. We see bags of the project and the water bottles in the changing room, meaning that the kids are using them, which probably spreads information about it.



Remarks :

Strange : hardly any explanations about water ! The technical terms of the first session were not reminded.

How have the kids been selected ??

- > youngest because they can follow the entire process next year also
- > oldest ones because they will enter the school next year and can transfer their knowledge then.
- > intermediates vote for projects they like to participate in.

CONTATO 03**Data / Hora:** 30/05/2019**Local:** Escola Básica**Participantes****APRH:** Presidente/Gestora do APRH (D.), Secretária (PM.), Técnico (T.)**Escola:** Coordenadora de Estabelecimento (HM.), Professoras (P.), Alunos (C.)**ISEG:** Mestrandas (M.)**Resumo:**

- Às 09:25h a HM. nos recebeu em sua sala para uma conversa sobre as repercussões do e pós dia 29/04, antes que fosse dado início à sessão de desenho. Ela explicou as diferenças das funções na administração da escola e abordou a importância de falarmos com diretamente com as professoras sobre esse parecer. Duas professoras relataram suas experiências com os alunos e pais, sendo percebido, forma geral, entusiasmo por parte das crianças e ampliação da informação aos pais. O projeto se enquadra no currículo escolar e as atividades acabam por estar todas relacionadas, o que potencializa a percepção de importância de cuidar da água e outros recursos, demonstrada pelos alunos. A sessão de desenho teve início às 10:10h, bem ajustado ao horário previsto. A abordagem inicial não retomou os pontos discutidos na sessão anterior e o direcionamento foi logo para o desenho, em si. As crianças começaram a desenhar e iam sendo orientadas pela equipe do projeto e apoiadas pela equipe da escola. Ao término do desenho, as crianças se posicionaram junto à tela para uma foto. As atividades tiveram continuidade na casa de banho, sendo solicitado ajuda das crianças para fazer o monitoramento do uso das torneiras. As crianças se comprometeram a fazer os registros e tomaram notas, com ajuda da professora. Na próxima sessão, ainda a ser agendada, será mostrado às crianças como fazer esses registros. Todos agradeceram a participação e a sessão foi encerrada às 11:20h.

Summary:

- At 09:25h the HM. received us in her office for a conversation about the repercussions of the April 29 and post, before the drawing session started. She explained the differences in roles in school administration and discussed the importance of talking directly to teachers about that opinion. Two teachers reported their experiences with the students and parents, being perceived, in general, enthusiasm on the part of the children and extension of the information to the parents. The project fits into the school curriculum and activities are all related, which enhances the perception of importance of water care and other resources, demonstrated by the students. The drawing session started at 10:10 p.m., well adjusted for the scheduled time. The initial approach did not take up the points discussed in the previous session and the focus was on the drawing itself. The children began designing and were being guided by the project team and supported by the school team. At the end of the drawing, the children were positioned next to the canvas for a photo. The activities were continued in the bathroom, and children were asked to help with the monitoring of the use of the taps. The children agreed to make

the records and took notes with the help of the teacher. At the next session, still to be scheduled, children will learn how to make these records. All participants thanked and the session ended at 11:20h.

Histórico:

- 09:15h: Eu e as outras mestrandas chegamos à escola. Ao passar pela portaria, uma das assistentes logo nos reconhece e diz que vai chamar a HM. para nos receber. HM. nos recebe e nos conduz até sua sala. Parece ter havido alguma outra comunicação a respeito dos horários, pois ela comenta sobre horário de 09:30h, porém o início da sessão de desenho estava previsto para 10:00h.

- 09:205h: PM. chega à escola e junta-se a nós. Ela informa que D. está a caminho.

- 09:25h: HM. toma seu lugar à mesa e se coloca à disposição para responder nossas questões, e lembra que o tempo é curto. Ela diz já ter algo para dizer. Digo que gostaríamos de ter a percepção dela sobre o evento do dia 29/04 e sobre as reações geradas dentro e fora da escola a partir do Projeto ECH2O.

-09:26h: HM. explica que a sua função é cuidar da escola e dos processos internos, salientando que a Coordenação Pedagógica é que é o departamento envolvido no desenvolvimento dos projetos e seus resultados. Ela informa que no plano do ano letivo, o projeto ainda não estava mapeado, mas foi possível encaixá-lo no programa e dar continuidade. Diante do que foi colocado como objetivo da conversa, ela sugere obtermos um parecer junto às professoras. Na sua visão, seria mais adequado pois elas teriam melhores condições de relatar quais as reações dos alunos, sobre o que eles faram com os pais e/ou que outras atividades se desdobraram em sala de aula depois da sessão.

- 09:30h: HM. dirige a palavra à S., com entusiasmo, dizendo que uma mãe de aluno lhe procurou interessada em receber o projeto na escola onde trabalhava. S. informa que já havia feito uma tentativa de abordagem na referida escola e que a mesma não havia retornado interesse. CE. pondera que pode ser interessante que as ações sejam feitas pelo menos com essa turma específica. Elas acordam em compartilhar os contatos para uma nova tentativa.

- 09:35h: Retomando ao contexto do evento do dia 29/04, HM. relata que foi bem organizado e sinaliza se importar bastante com pontualidade. Completa que a explanação do projeto foi boa e enfatiza que as pessoas envolvidas são simpáticas e profissionais. Nesse momento, pareceu-me que ela incluiu nos incluiu (mestrandas) no time do projeto. Ela conecta isso com a importância de o processo de aprendizagem precisar de uma componente emocional bem cuidada, no sentido de ser o que permite que as crianças estejam abertas para a informação. CE. destaca que a temática abordada pelo projeto é transversal e curricular, sendo mesmo muito presente na escola e aliada com outros projetos desenvolvidos. HM. diz gostar mais da expressão “eco desenvolvimento” para representar todo o conjunto de vertentes ligadas à sustentabilidade.

- 09:40h: HM. levanta-se em direção à porta da sala e informa que irá chamar uma professora para falar conosco rapidamente e que irá substituí-la em sala por alguns minutos para conseguirmos um parecer mais próximo. D. chega à escola e também se junta ao grupo na sala da HM.. Ela nos cumprimenta rapidamente e segue conversa com S. dentro da sala.

- 09:43h: P.1 entra na sala para a conversa. Informo a ela sobre o nosso interesse em saber qual foi a reação dos alunos com o último evento. Ela diz não ter participado da sessão do dia 29/04 e por isso informa que a primeira ação foi perguntar às crianças o que tinha ocorrido, pedindo um relato pelas próprias crianças. Ela diz que teve bom retorno com as explicações. De forma enfática, ela pondera que a temática do eco desenvolvimento é muito presente e discutida em sala. Nesse âmbito, “as crianças são mesmo muito atentas e também nos observam”. Por esse motivo, P.1 diz que o trabalho principal é educar pelo exemplo. Ela também comenta sobre ações habituais que são feitas, a exemplo da

apresentação de notícias trazidas pelos alunos, que complementam o escopo de todo e qualquer projeto da escola. Comenta que assuntos relacionados a temática da água aparecem com frequência nessas atividades e que é sempre pedido às crianças falarem com os pais sobre o que foi discutido em sala. Ela pondera que claro que existem diferenças no comportamento dos pais, mas que de forma geral, “são pais preocupados”. D. interfere e diz que ao final do projeto a equipe irá fazer uma avaliação e que eles podem convocar a associação de pais para conseguir avaliar a amplitude dos resultados. Ainda pergunto sobre o conhecimento do projeto antes da sessão do dia 29/04 e P.1 destaca que já era conhecido. D. diz que houveram momentos anteriores para tratar disso, os quais as mestrandas não participaram. Soou com alguma estranheza, pois essa já era a terceira ação em conjunto e essa informação não havia sido passada anteriormente. P.1 retoma e conta um caso que sucedeu na semana da sessão. Ela diz ter sido questionada por uma das crianças quanto ao consumo de água para lavar uma fruta antes de comê-la, que talvez seria melhor usar só um pano, pensando em não utilizar água para isso. Mas a professora logo orientou sobre lavar com água. Dado o tempo indicado pela HM., agradecemos a presença de P.1 e ela retornou para a sala de aula.

- 09:50h: HM. volta para a sala e diz estar disponível para chamar outra professora para uma abordagem. D. diz não poder esperar para dar início à sessão de desenho e as entrevistas são encerradas. D. e PM. sugerem à HM. que a atividade seja feita no pátio externo e então todos se dirigem para lá.

- 09:53h: Ficamos todos esperando na porta do pátio externo. Aos poucos chegam as crianças selecionadas como representantes das suas salas, vestidas com a camisola do projeto e bloquinho de notas. Uma outra professora vai organizando as crianças e uma das assistentes nos pede para aguardar, pois estão limpando a área externa, já que essa é muito exposta ao tempo.

- 10:03h: A área é limpa e todos se dirigem para o local da atividade. O espaço parece não ter sido avaliado previamente, tendo em vista o tempo gasto para iniciar a sessão. Não há uma área específica para as crianças ou equipe da escola se sentar ou receber as instruções para a atividade. No pátio ao lado está havendo a aula de bicicleta.

- 10:10h: D. e PM. explicam “hoje nós vamos fazer um desenho”. Superficialmente, PM. diz que se refere a forma como a água chega até nós. Não foi feita abordagem específica ao ciclo da água ou retomada ao assunto discutido na sessão do dia 29/04, no sentido de dar espaço de fala às crianças. Para a dinâmica fluir, S. mostra alguns cartões com as imagens e palavras que devem conter no desenho, contribuindo para uma atividade mais direcionada e com melhor aproveitamento do tempo.

- 10:15h: Participam da sessão de desenho crianças de todas as idades enquadradas na escola. Elas se interessam pelo tipo de giz que será usado na tela. À medida que S. mostra novos cartões, as crianças começam também a interagir entre si. As crianças mais velhas direcionam as mais novas. C.1 diz: “desenhe isso aqui pra o rio chegar por aqui”. O comportamento e reação dos mais novos se dá de outra forma. C.2 fala: “quero desenhar mais flores”. As crianças mais velhas demonstram maior compreensão sobre o ciclo da água, em termos de processo.

- 10:25h: Enquanto as crianças desenhavam, pergunto à P.2 sobre as repercussões da última sessão, a qual ela esteve presente. Ela diz que no mesmo dia da sessão de demonstração ela levou dois alunos da turma (idade 6 anos) na reunião de pais que sucedeu logo depois para falar sobre o que aconteceu naquele dia e como funcionava o dispositivo instalado nas casas de banho. P.2 ressalta que a reação dos pais foi muito positiva em relação a isso. Diz também que as crianças voltaram animadas para sala de aula e que tinham gostado muito da sessão. De forma mais específica, ela diz que depois da instalação dos dispositivos, as crianças quando vão à casa de banho só querem utilizar as torneiras adaptadas e fazem fila, se for preciso, para usá-las e evitam o uso das torneiras que deitam água fora em maior volume.

- 10:45h: HM. atua de forma muito positiva, acompanhando de perto o trabalho das crianças. A abordagem fica facilitada devido ao pequeno número de crianças selecionadas para essa atividade. HM. e P.2 incentivam as crianças, nome a nome, para fazerem um desenho muito bonito e com coerência.
- 10:53h: As crianças terminam o desenho e a atividade é encerrada. Não há um fechamento específico. Nesse momento, D. e PM. pedem para as crianças se posicionarem para fotografia.
- 10:55h: Pergunto às crianças o que foi que desenharam nessa atividade. C.3 diz que é para mostrar o caminho da água, da natureza até as nossas casas. C.4 completa que é um ciclo e que também foram desenhadas as tubulações e torneiras por onde a água passa. C.5 diz que precisa de água para fazer tudo aquilo que está desenhado.
- 11:02h: Todos se dirigem para a casa de banho. T. se junta ao grupo e conduz a atividade de medição. Ele retoma algumas coisas abordadas na sessão anterior e diz que vai precisar da ajuda das crianças para as marcações de uso das torneiras.
- 11:07h: As crianças começam a tomar notas. Uma delas pergunta “qual é mesmo o nome do dispositivo?”. T. explica e as crianças se voltam aos bloquinhos de notas. P.2 ajuda as crianças mais novas com a escrita. Outra criança diz haver algumas torneiras que não estão funcionando. O grupo concorda e T. responde que vai verificar e reforça a importância de as crianças sempre passarem essas informações.
- 11:09h: D. pergunta às crianças quem é que já disse aos pais sobre o que tinha visto. Quase todas as crianças levantam as mãos em sinal de que já o fizeram. HM. e D. lembram que além de falar com pais, as crianças precisam falar sobre a sessão também com os outros alunos das turmas.
- 11:11h: **T. diz que na próxima vez que ele for à escola levará uma ficha, impressa em tamanho grande, para as crianças irem marcando o uso.** Parece ter sido definido durante a conversa e perguntas das professoras e da HM. T. me confirma logo depois sobre isso.
- 11:15h: É encerrada a sessão e as crianças são levadas de volta às suas salas. HM. e PM. ficam de trocar alguns e-mails a respeito da próxima agenda, dada a dificuldade de definir de imediato em função das atividades de fim de semestre.
- 11:20h: HM. nos conduz até à portaria. Todos agradecem e se despedem.

Relato da dinâmica de criação de um desenho em painel do projeto ECH2O em Escola Infantil de Lisboa em 30/05/2019

Sumário

Apos 30 dias aproximadamente da última sessão de sensibilização em uma escola infantil de Lisboa, foi realizada uma dinâmica com um grupo de 10 alunos escolhidos como representantes de suas turmas. Os alunos de maior idade foram escolhidos por votações dos próprios alunos em cada uma de suas turmas enquanto que os alunos mais novos foram escolhidos pelo Professor de sua turma. P escolheu o aluno mais novo, de forma que possa acompanhar todo o percurso do projeto, e o aluno mais velho para este possa repassar informações para sua turma no próximo ano. A dinâmica durou aproximadamente 1h20 e foi realizada ao fundo da escola em local coberto.

As crianças vestiam a camisa azul do projeto. Foram distribuídas cartas com nomes do ciclo de vida da água para que as crianças pudessem desenhar em uma tela com lápis de pastel. As crianças se organizaram ao redor da tela, e desenharam juntas o funcionamento do ciclo da água, todas participaram. Ao final, as crianças tiraram uma foto com a tela e se dirigiram a casa de banho para um encontro com T enquanto ele instalava mais dispositivos nas torneiras. Não houve explicação por parte das pessoas do projeto ECH2O sobre o motivo de tal dinâmica, nem um resgate do que ocorreu na sessão do mês anterior, tampouco uma explicação ao final sobre o ciclo de vida da água com base nos desenhos do painel. Acredito que faltou gerar links de entendimento para as crianças e a dinâmica acabou por ficar “solta” no processo.

Durante a visita de T, as crianças sabiam de suas responsabilidades como representantes de suas turmas, pois logo abriram seus blocos de nota e tentavam anotar coisas que poderiam ser importantes, tais como o nome do alicate que T estava utilizando e o nome dos dispositivos.

Realizamos algumas perguntas para HM sobre o projeto, e entendemos que o tema ecologia e sustentabilidade já faz parte do programa pedagógico de todas as escolas e é aí que o projeto ECH2O se insere. Quando entrevistamos P, embora não estivesse presente na sessão do mês anterior, nos informou que as crianças comentaram com seus pais sobre o projeto e se guiam muito mais pelos exemplos dos pais e professores que pelo conteúdo passado em aula, exemplos como apagar a luz ao sair da sala e limpar a garrafa com papel e não com água.

Percebemos que ha crianças utilizando as garrafas e mochilas dadas pelo projeto ECH2O, a bandeirola do projeto também estava presente no centro da escola.

Relato detalhado

9hrs chegamos à escola e adentramos a procura da HM para realizar algumas perguntas antes de iniciarmos a dinâmica com as crianças. Ao encontrarmos com HM questionamos se podemos realizar algumas perguntas antes da dinâmica iniciar, HM nos questiona se as perguntas tomaram muito tempo, e nos respondemos que será rápido e ate o horário da dinâmica, no intuito de não atrapalharmos a programação do dia. HM nos direciona para sua sala e nos pede alguns momentos antes de iniciarmos as perguntas.

9h15 Enquanto aguardamos, PM chega à escola e nos encontra na sala da HM. HM retorna a sua sala e iniciamos algumas perguntas. Questionamos se podíamos gravar a sessão, HM nos responde que prefere que não. PM cita o exemplo ocorrido na instituição quando adquiriram um gravador para gravar as reuniões e não funcionou muito bem. HM, em resposta a pergunta sobre suas percepções sobre a sessão

realizada pela APRH na escola no mês anterior, informa que ela é uma mera expectadora, e como coordenadora de escola possui a função de tomar conta da escola, coordenador e receber sugestões de projetos e falar com colegas interessados, e ha um coordenador pedagógico que cuida de diversas escolas e este é o responsável por avaliar o conteúdo pedagógico que será passado nas escolas. HM diz que somente conversando com os professores das turmas é que teremos o retorno sobre percepção dos pais. HM informa que uma Mae entrou em contato com ela questionando se é possível fazer este mesmo projeto em outra escola secundaria, onde ela da aula, pois gostou imenso sobre o que sua filha lhe informou e viu o cantil do projeto e estou da ideia. PM fala que já haviam ido nesta escola, agendado uma reunião com os professores que acabou sendo desmarcada, mas que está à espera do feedback deles. HM questiona se é possível realizar o projeto com apenas uma turma da escola, PM responde que sim, que seria possível realizar. PM informou que já haviam inclusive feito a contagem de dispositivos que seriam necessários na tal escola, mas que como não tinham recebido retorno, não haviam feito nada. HM encaminhara o contato do P para que PM possa organizar. Sobre a falta de tempo e feedback da outra escola, HM defende que ha muitos eventos ocorrendo nas escolas e que acabam por tirar o foco dos professores para as coisas que são importantes. HM informa que ha muitos projetos que eles são obrigados a fazer, e as vezes não ha realmente tempo para fazer outros projetos importantes. PM diz que o projeto APRH acabou por apanhar as escolas quando o projeto pedagógico já estava feito.

Observador questiona sobre o planejamento pedagógico e como funciona. HM responde que em julho eles realizam o projeto do próximo ano letivo.

Observador questiona HM se o meio de um projeto como este chegar à escola é por meio do Coordenador pedagógico. HM informa que não, pois como ele cuida de muitas escolas ao mesmo tempo, não tem condições de estar presente sempre, logo, HM quem acaba por fazer este papel, sendo que não a obrigação de aferir em termos de qualidade pedagógica o que saiu do projeto e são os professores que tem condições de aferir esta qualidade após o projeto pois estão no dia a dia com as crianças.

Observador questiona se foi tratado algo sobre o projeto nas reuniões pedagógicas com os pais dos alunos, HM informa que sim. HM também informa que nas reuniões anuais com os encarregados da educar, os professores apresentam o projeto pedagógico de todo o ano. Ao longo do tempo, em outras reuniões com os pais mais periódicas, HM diz que os professores falam sobre todos os projetos que acontecem na escola.

HM, ao ser questionada sobre a forma de comunicação do ECH2O na última sessão, HM diz que foi estupenda e que tudo foi muito bem organizado, mesmo para ela que liga muito para pontualidade e organização e fica preocupada com a quantidade de alunos. Em termos de explanação e organização o projeto é muito bom, e as pessoas são muito simpáticas e muito profissionais.

9h40 HM se da conta do horário e nos questiona se queremos falar com algum professor. PM está falando com GP ao telefone. Aproveitamos para questionar se ha o desenvolvimento de assuntos da mesma temática do ECH2O na escola, HM responde que a temática é transversal e é curricular, temas como sustentabilidade e ecodesenvolvimento são desenvolvidos na escola. HM questiona quanto tempo precisamos para a entrevista pois substituirá a professora em turma enquanto isto, questiona se 10 minutos são suficientes, informamos que sim.

10hrs P chega à sala e informa que está tentando agendar uma consulta enquanto está na sala conosco, mas que como a ligação deve demorar a ser atendida, acredita que não ha problema. D chega à escola e nos encontra na sala, D e PM conversam enquanto fazemos perguntas a professora. P informa que

como falou ano passado com seus alunos sobre preservação do meio ambiente, as crianças aprenderam sobre poluição, sobre economizar água em casa, então já tinham uma noção sobre o assunto tratado pelo ECH2O. P informa que certa vez promoveu um exercício em sala para que as crianças levassem a escola notícias dos jornais que viram casa e levassem para discutir. P nota que aqui na escola, os alunos estão muito atentos aos exemplos dos professores, como sair da sala e apagar a luz, e reforça que as crianças estão mais atentas aos exemplos dos professores que em alguns conteúdos. P informou que em outro projeto recente na escola sobre o território marítimo português, as crianças fizeram perguntas como “e se acabar a água, só restaria salgada, e agora?”, o que demonstra que elas próprias levantam questões que envolvem os temas. P não acompanhou a sessão de sensibilização que ocorreu no mês anterior, e por isso, pediu aos seus alunos que lhe explicassem o que viram, o que aconteceu e como foi. Ao ser questionado sobre a opinião dos pais sobre o projeto e se eles o conhecem, P diz que os pais conhecem pois questionou as crianças se elas haviam contado a eles. D diz que é uma estratégia do projeto ter um momento de avaliação dos impactos do projeto, e haverá uma segunda visita para medição com as crianças. Após este momento, o projeto quer envolver os pais, já estão em contato com a associação dos pais, mas não há nada organizado ainda.

P diz notar que as crianças ouvem e estão muito atentas aos exemplos. D informa que houveram 4 reuniões ao todo na escola, e que acredita que ainda falta uma reunião com os pais. P reforça que acha que os pais não têm tempo de conversar com os filhos, que as crianças ficam jantar em frente ao tabuleiro. P costuma conversar com os pais e muitas vezes sobre assuntos não ligados à educação. P diz que em sua turma os pais são preocupados, ouvem, e percebe que as crianças discutiram os assuntos com os pais antes de trazer a escola. Como não há mais tempo para perguntas, agradecemos P e a liberamos para retornar a sua sala.

11h A dinâmica com os alunos tem início. Há 11 crianças escolhidas para o projeto, todas estão vestidas com a camiseta azul do projeto ECH2O e receberam um bloco e uma caneta para realizar anotações no momento da medição com o técnico (T). Nos direcionamos para a área externa e coberta da escola, S e GP posicionam a tela e os lápis de pastel coloridos em cima de um banco.

D pede para as crianças dizerem seus nomes, e cada um de nós ali presente também se apresenta. D pergunta se as crianças estão preparadas para desenhar a água, e pergunta “de onde vem a água?”, um aluno responde “o mar”. PM mostra alguns papéis e explica que eles têm a ver com o ciclo da água, e pede para 4 alunos retirarem um papel cada um. Um aluno tirou o sol, outro as árvores, outro tirou as pessoas e outro as flores. PM explica que eles devem fazer um desenho que é indicado pelo papel que eles escolheram. D dá o exemplo do sol e questiona, mostrando a tela, em que local ele deve ser desenhado. O aluno que tirou o sol fica empolgado e levanta a carta e começa a desenhar o sol com o lápis de pastel amarelo. D vai direcionado na tela o local onde os desenhos devem ser feitos. PM distribui mais cartas como: campo, primavera, rio, poço, chuva, nuvens. Ao distribuir a carta “Primavera”, D explica que a criança pode fazer o que ela quiser sobre a primavera: pássaros, flores..., Ao questionar qual aluno gostaria de desenhar a carta “Rio”, dois alunos levantam as mãos, enquanto que apenas um é escolhido. As crianças ficam ao redor da tela e começam a desenhar. A criança que tirou a carta “primavera” pede ajuda para P, talvez por ser a criança mais nova do grupo. S pergunta quem quer desenhar o “mar”, um aluno que parece estar muito empolgado levanta as mãos e diz que quer fazê-lo. HM dá indicações para a aluna que tirou a carta “montanhas” para que desenhe mais neve e faça traços mais grossos, e também sugere ao aluno que tirou a carta “Rio”, que este deve ser desenhado mais ao centro para descer no meio do desenho. Há duas crianças desenhando peixes na tela. HM pergunta as crianças se o rio que estão desenhando é o Rio Tejo ou o Rio Douro. D indica que as crianças podem desenhar mais uma casa do outro lado da tela. As crianças com menos idade desenharam

flores na parte de baixo da tela. PM questiona as chancas o que estão desenhando na horta, uma das crianças responde que sua irmã faz parte da horta da escola e estão plantando rabanetes.

PM e HM conversam sobre o projeto da horta e com uma empresa como a Monsanto poderia apoiar este projeto. HN explica que a Câmara e o órgão quem paga a conta da água, mas é a Junta da Freguesia quem faz as reformas quando necessárias, e por isto, eles deveriam se articular melhor por conta dos interesses.

HM pega novas as cartas que ainda não foram desenhadas, “poço” e “torneiras”. Alguns alunos começam a desenhar canos, ligando o Rio e as casas. Há uma casa com dois canos, dois alunos diferentes desenharam canos. Um aluno desenha um regador pra horta, outro diz que acha que a horta precisa de mais cano. Um aluno desenha um chafariz, e PM indica que precisa de um cano ligando o chafariz ao cano principal. Crianças desenharam frutas na árvore. Preenchem a horta com tomates e alface.

HM entrega dois lápis para crianças que já não estavam mais a desenhar. HM pergunta a uma P que estava acompanhando outra atividade ao lado qual o animal que está ao centro da tela, e P responde que é uma vaca, e logo em seguida P diz a criança que a desenharam “viu como está bem desenhada”.

P e HM discutem aonde podem colocar a tela quando pronta, HM sugere colocar a tela em um sítio com bastante destaque, e P diz que vai criar uma placa com os cartões também. HM questiona se as casas não devem ter janelas. As crianças pintam todos os espaços da tela, com azul do céu ou com verde de campo.

P e HM discutem como tirar a melhor foto considerando as crianças que não possuem autorização para fotos. As crianças se organizam para tirar foto próximas ao banco de madeira em que foi realizada a atividade. P e HM também tiram foto com as crianças. D e PM tiram fotos com as crianças e a tela. Ao final da sessão de fotos, Observador (O) pede ao aluno que está segurando a tela para explicar o que eles desenharam. O aluno responde que é como eles recebem a água, pelos rios, e outra aluna ajuda a explicação dizendo que a água chega pelos canos, a chuva vira Rio, outra aluna fala que tem vários animais na tela como vaca e cavalo.

Toca o sinal do intervalo e enquanto as crianças se dirigem a parte central da escola, o aluno que segura o painel mostra a alguns de seus colegas que estão entrando na área aberta. Outras crianças percebem o painel e perguntam do que se trata. Todos nos dirigimos para a casa de banho das turmas com menor idade, e lá encontramos o técnico (T).

T fala que ficou faltando instalar o dispositivo em duas torneiras nesta casa de banho. As crianças abrem o bloco de notas que receberam e pegam as canetas para anotar coisas. PM pergunta o nome do alicate que T utiliza para instalar os dispositivos nas torneiras. Quando T responde o nome “alicate extensivo”, PM sugere que uma criança anote em seu bloco de notas. Uma criança pergunta a T qual o nome dos dispositivos, ele responde “dispositivo de redutor caudal”, e algumas crianças começam a anotar.

T pergunta as crianças se há alguma torneira avariada nas outras casas de banho desde que ele esteve na escola a última vez. P diz que tem uma descarga com problema, e que quando ela está vazando água, os alunos retornam e apertam novamente para que a mola volte ao lugar e a torneira pare de vazá-la.

D pergunta as crianças quem delas já contou aos seus pais sobre o que estão fazendo na escola, algumas crianças levantam as mãos e dizem que sim. As crianças tomando notas, T indica que eles devem anotar a data de hoje no bloco e escrever o que eles estão fazendo ali na casa de banho. D fala para as crianças que eles são responsáveis por explicar para suas turmas o que eles vieram fazer na casa de banho depois.

HM reforça o papel deles como representantes das suas turmas. D pergunta as crianças se elas se lembram o nome de T, e uma criança prontamente responde o nome de T. P ajuda os alunos que ainda não sabem escrever, e escreve a data e algumas outras coisas no bloco de notas. T explica brevemente o que eles irão fazer na próxima visita de medição, mostra um papel e uma prancheta. P questiona se as crianças possuem alguma dúvida para tirar com T e um aluno pergunta de onde vem essa água. T diz que a água vem do Rio, vai pra estação de tratamento e depois vem pra cá. D aproveita o exemplo e diz que é a mesma forma que eles desejaram na tela hoje.

Como estamos na hora do intervalo, as crianças precisam acabar a atividade para irem lanchar. P ajuda as crianças a fecharem os blocos de nota. Enquanto as crianças saem da casa de banho em direção as suas salas de aula, percebo no armário de mochilas dos alunos mais novos que ha pelo menos 3 garrafas de água do projeto e 2 bolsas que foram dadas aos alunos na sessão do mês anterior.

Pergunto a HM qual critério foi utilizado para a escolha das crianças. HM informa que cada turma realiza sua votação para escolha do aluno que irá para o projeto. Mais cedo, perguntei para P qual havia sido o critério de escolha na turma das crianças com menos idade, que me informou que havia escolhido o aluno mais novo e o mais velho, de forma que o mais novo acompanhe todo o projeto, e o mais velho possa levar informações sobre o projeto para a turma do ano seguinte. Ao questionar HM sobre este critério, me informou que coo as crianças são menores e não conseguiriam realizar uma votação, logo, a professora escolheu.

10 - Thursday, May 30th, second session at Centro Comunitario de Telheiras

Thursday, May, 30th ; 12 am

PM, T, K, Centre Coordinator (CC), Retired people, Staff

11:40 am : We (K, T, PM) arrive 20 Minutes in advance to our meeting.

Centre Coordinator (CC) welcomes us. PM gives her the communication material : an entire shopping bag of ECH2O-Água bottles and bags with logo print.

CC tells us about the Telheiras festival that took place last week. It is very important to her to spread the word about it. She already invited us when we were here last time. Now she explains the concept, mostly talking to PM. She states that it was great, the focus and spirit of the activities lies directly on sustainability : there were even conscious and responsible healthy meals, and zero waste workshops ! PM likes the idea and regrets not to have come (this answer is probably out of politeness).

Staff members we interviewed remembers and welcomes me warmly. They are very communicative.

CC apologizes for having the activity start a little later than scheduled. In the meantime, she talks about how old people are often neglected in society. And how sending them to Centres like this is broadly stigmatized even though it does them good, because they have company there. They can come however it suits them, flexible models are very important in order to fit families' and retired people's needs and schedules.

When T asks if everything is alright with the devices he installed she complains about one sink, where no one washes hands anymore since then because it would wet their cloths. The tap opens too easily, with too much vigor. This is annoying. T promises he'll have a look at it.

The project flag is still in the entry hall, reminding the first phase session. On the bar lies a flyer of the project with an article about the festival.



CC tells that CCT now has the image of being an eco-conscious institution and is adaptable to everyone's situation. But anonymity builds up in the neighborhood, so seniors struggle to get in

contact with their entourage. Thus, it is the Centre's responsibility to assure this exchange. This is why they have projects with kindergarten and school kids. Even projects like ECH2O-Água are important to have them exchange with other people.

12:08 another staff lady arrives. She asks T and PM what exactly is about to happen today in order to compose the right participant group. T explains that he wants to ask them about the demonstration he did on April, 10th and needs to know how they liked it or if there is anything to be changed or improved. The lady heads off to gather a little group of four ladies while she already sends us to the bathroom with one man, sitting right next to our table. He is very happy to come.

12:12 We reach the bathrooms. CC asks one senior washing hands if he likes the devices. He tells its "confortavel", he even prefers it now than to the normal flow because the soap washes of more quickly. The man who came here with us agrees with his colleague. In the meantime, the group of ladies arrives and T asks them if they also "feel comfortable" with the device, or if they have any difficulty ?

Everyone tells it's fine, they don't mind the feeling, even though they recognise the difference in the flow compared to the taps they have at home. The first man says that actually he doesn't like it because it's not nice to drink from the tap with the device. It doesn't kill one's thirst and spills water everywhere. But this is why he started to use a cup again ! "Muito bem", tells him the director, this is a way to safe water. He agrees, but doesn't look convinced.



T goes to see the tap they have issues with (it opens too easily so water goes everywhere because of the high pressure). T tells about more concentrated devices. He'll bring one during the next visit and change it to make it more convenient. There are adapted solutions to everything !! D is happy.

12:20 We all go back to the community room to ask residents of the centre how they feel about the device in their home? The elderly lady doesn't stop reading her magazine when CC sits down next to her, but tells it's all right, she lives well with it.

12:22 T, PM, CC and me go to the water counter outside. T takes photo to compare the use since our last venue.

12:28 After going back inside and telling goodbye, we leave.

Remarks

Here : gathering and use of feedback —> adapted // improved project and device !!

T's initiative.

Elderly generally like the device, but they don't care too much about the issue. They're interest lies in comfort and saving money.

11 - Wednesday, June 5th 2019, 10am Second Session at Escola Secundária de Sto. André (ESSA)



1 member of Câmara Municipal de Barreiro (B)

PM

T

Co-director of ARPH (L)

Arts Teacher (A)

5 pupils, two boys and three girls, chosen by the teacher to be mediators of ECH2O because they were still available to participate. All come from the “cidadania” specialization, focusing on community actions.

We did not attend any other session in ESSA

10:00 P, T and K arrive, B and C are already waiting for us.

10:15 A welcomes and leads us and three pupils to a meeting room where we all sit down.

L, a printed version of the PPP slides in front of him explains, mainly looking at the three pupils while he talks, what APRH’s initiative ECH2O-Água is about: competition for water resources through different stakeholders, raising public awareness of the issue and spreading best practices to save water, including through faucet aerators, but mainly thanks to people’s own feeling of responsibility towards the planet and society. They all listen carefully, but only two out of the three seem interested, they nod approvingly, confirm they’re following. The second boy listens, but tends to look away more often and reacts less than his colleagues. L insists on the importance of small changes and the mobilisation of many members of society, since “Todos os gotas d’água contagem” when trying to reduce the water footprint. When undertaken in high numbers, individual micro actions can help as they add up. But APRH cannot tell everyone, they need help to pass on the message. He invites them to be “multiplicadores” of the project’s message.

Meanwhile two more pupils have arrived and listen also. L did not repeat his explanations about the project itself for them, since all of them have assisted session 1 one month ago and are aware of the devices installed in the school, so they know the concept and confirmed to remember.

Four out of the five have a willing, motivated expression on their faces when L talks about their involvement in “passar palavra”.

A asks when the project is about to end in order to understand what kind of project the pupils could consider in order to do so. The school already has experience in organising art projects, photography and design contests, etc. Moreover, linking ECH2O to the project “teachers try science”, the school has the intention to relate future projects to the Tagus river, so as to have a local reference and eventually concrete actions, eventually a game about reducing water use.

PM : By April 2020, but the Câmara Municipal de Lisboa will take it over and bring the sessions to more schools, social centres, etc.

PM, A, T and L discuss the possibilities. A explains that the schedule is not perfect because it doesn't fit the school year. ECH2O team confirms that they know, but they rely on their funding partners and their agendas. While PM, A, T and L talk about difficulties to work in these conditions, as always in project mPMgement when depending on various parameters, the pupils stop paying attention and start discussing among them.

L recognizes that they unhook and addresses to them again, saying that the team will need them to talk about how to save water to their friends, family and fellow students.

Girl 1 tells she enjoyed using the device here in school and was thinking of trying to convince the town hall to create a campaign to promote them because she thinks they are a good way to raise awareness. Everyone listens to her, looking at her.

L confirms smilingly that this is exactly the spirit of the project, to have one action lead to another, but

PM quickly makes clear that APRH does not sell or promote the devices, since it is not the intention to give people the impression that technology alone is the solution to the problem.

Girl 1 answers that she knows this, but that it could still give more weight to such a campaign.

Boy 1 suggests to act via virtual social networks in order to reach their age group more specifically.

PM quickly answers, by mainly looking at A, that APRH surely does this, via the newsletter, facebook and instagram and through their media partner ambientemagazine.pt

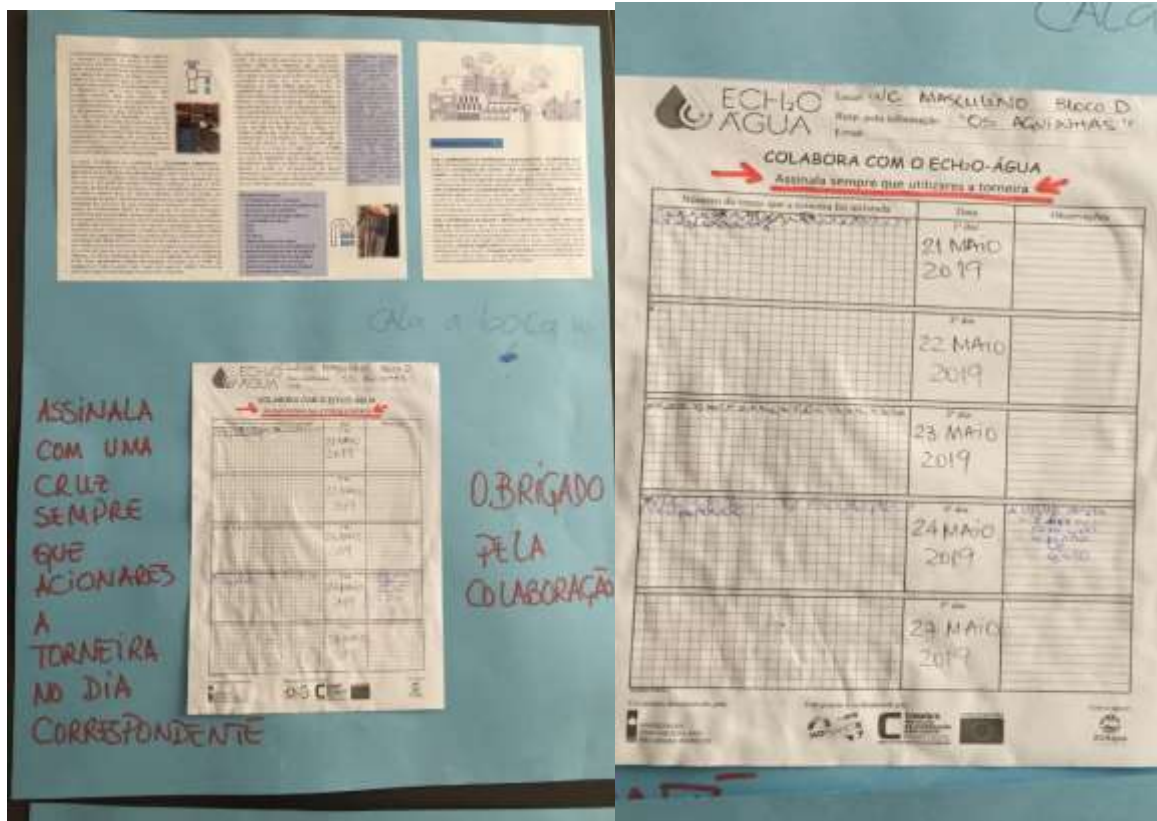
L explains how much the association appreciates the pupils initiatives and ideas, because for now, the project is relatively institutional and the idea was to open it up much more.

Girl 2, after drinking from the project-bottle explains that she's willing to talk to everyone in her numerous circles (social centre, younger children she helps with the homework, at school, at home, etc.).

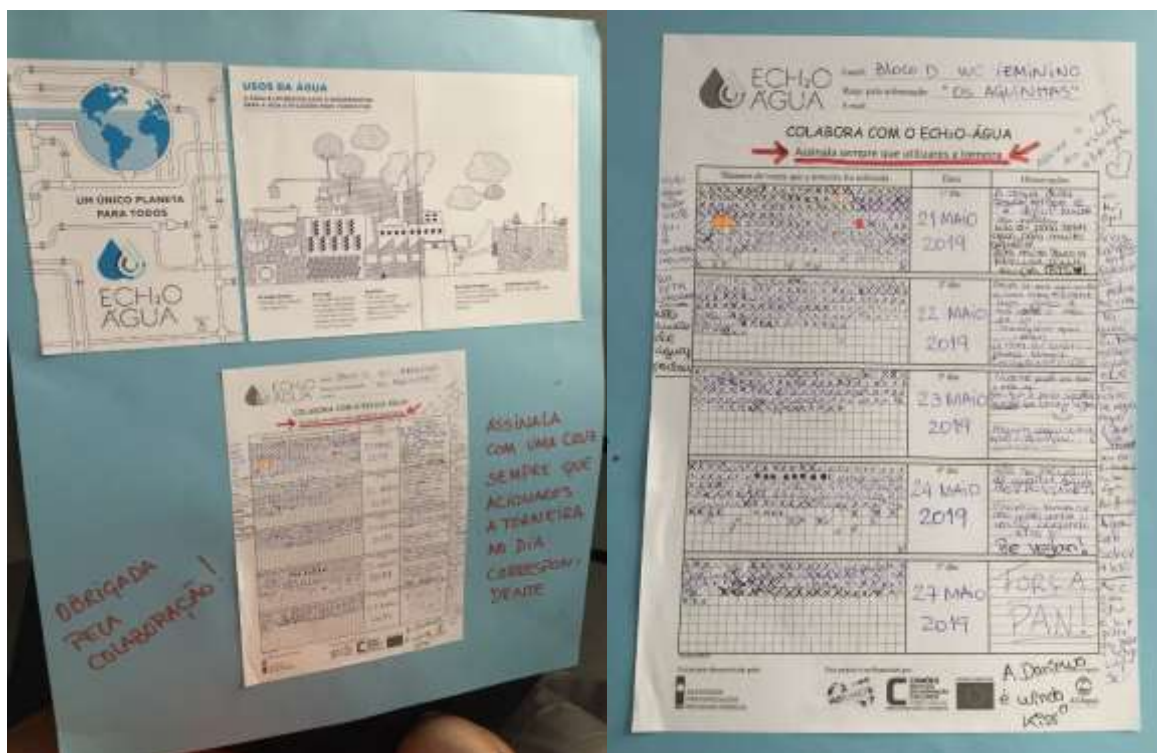
Boy 1 confirms they will talk about different water uses, including indirect ones as through nutrition and other consumable goods, to everyone they know.

PM suggests to provide the communicational material because it is crucial to stick to the communication strategy and visual identity of ECH2O in order to be in line with the project's funding partners conditions.

A brings the posters with the results of the school internal participative measurement of water use that is part of ECH2-Água's phase 3:



Boys' bathroom



Girls bathroom

T, L and B have a look at it, T explains that he will use this to indicate how much water was saved in this one week period thanks to the installed devices. A apologizes for the boys' one apparently not have been used correctly, but making people participate is always difficult.

Meanwhile girl 3 tells she would mostly try to communicate via instagram, as it is better to reach young people than facebook, they use it more. Her colleagues agree, but PM invites them to use it, but always to take care to mention the funding partners correctly. Together, L, girls 1 and 3, boy 1, A and PM exchange about how a knowledge transferring chain can be installed, starting with them passing the message on during the official project phase and starting a snowball effect through their actions. PM and L explain the conceptualization of the mobile app to calculate individual water footprints, and how T is involved in it. PM suggests to visit the website so as to be informed about the project and get more ideas. T asks them to invite through whatever action their planning to answer to the questionnaires on APRH's website to help him gather important data. Girl 1 and boy 1 look at each other, laugh, and say they will do it on the weekend together with all of their friends. T and L suggest to repeat the measurement experiment in autumn, then the pupils can use the comparison of participation and estimated amount of saved water from before and after their future actions. That way they can determine if awareness has an impact on their fellow student's behaviour. T will transfer to them his results about this current monitoring week, reported on the sheets to determine how much water was used within the week of monitoring thanks to the installed devices. Boy 2 did not participate in the discussion at all and looked relatively unconcerned all along the conversation.

11:15 After thanking everyone and confirming to stay in touch, we leave the school.

Intermediate time

We leave with B in car, pick up several kits at PM's car and go to the community centre. PM and T check on what they will now do : check the devices and get feedback from the users.

12 - Wednesday, June 5th 2019: Monitoring visit at Centro Social e Paroquial Padre Abílio Mendes
PM, T, K, B,
Technical Director of the Centre (TD)
Caretaking staff (3) (C)



Flag and brochures exposed in the centre's waiting area

11:40 TD welcomes us and is curious about what is about to happen today. She asks T to send her the detailed results of his calculations because she would like to communicate to seniors and staff how much was saved, in Liters and also in money. She really wants to know how much they save, also in terms of charges because their bill is very high.

As far as she knows, everyone is satisfied with having the devices installed.

She shows us estimation of how many times taps (WC and kitchen) are used, showers are given to seniors and how much water is used in general. She admits that it is very difficult for them to measure or monitor exactly, because the seniors constantly need assistance and cannot expected to do it correctly on their own.

T checks on taps and showers, talks with caretaking staff if everything is ok for them since they use the advices? Yes, absolutely, no problem. The Use is perfectly convenient.

Together with TD and T, they determine the amount of water used daily for showering the seniors (Medium 15 Banhos à 15 minutes per day with round about 5-7 minutes of actual water flow).

No mentioning of environmental motivation in saving!

T checks on taps upstairs, all installations are okay.

TD asks if she can buy more devices and kits to diffuse them, spread the word?

PM explains that this is impossible, funding being restricted to the initial plans, the kits are reserved for participants and the devices are only commercialized in big amounts by AllAgua.

12:03 water counter check, TD asks again for transfer of the data obtained by T.

12:08 back in B's car he hands last year's monthly water count of both institutions to T (school varies a lot, centre more stable). He is allowed to keep it for his PMlysis and to see if estimation of centres director is realistic. He gives T his phone number and mail address in case he has more questions: very helpful!!

12:10 in the car T shows me the new, child friendly version of the monitoring sheet he developed:

ECHO-ÁGUA Projeto
de monitorização
da água

COLABORA COM O ECHO-ÁGUA
Assinala sempre que utilizas a torneira

Resposta da torneira que a torneira foi utilizada

Resposta da torneira que a torneira foi utilizada

Resposta da torneira que a torneira foi utilizada

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Resposta da torneira que a torneira foi utilizada

Observações

Projeto financiado por

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He will give it to EBL tomorrow, so as they can start their monitoring experiment next week.