

# WORKSHOPS VALUING WATER: ENGAGING CHILDREN AND YOUTH

Water and Humanity Working Paper Series 2020 1(2),  
update July 2021



Heritage, Diplomacy and The Future

# Workshops Valuing Water: Engaging Children and Youth<sup>1</sup>,

## 1. Introduction

A workshop series for youth, on “Valuing Water”, has been developed under the framework “Water and Humanity”. The wider purpose of that framework is to stimulate collaborative projects in support of better management of our water resources. The series of youth workshops responds in part to the absence of opportunities for youth to be inspired to reflect on issues of sustainability, water among them, and to have a voice, a set of avenues, to make a constructive difference in how we manage them today and in the future. Additionally, the initiative picks up on the observation that youth and children, if given the opportunity, tend to respond with great vigour to this kind of opportunity. That presumption is further underpinned by the pilot series of workshops undertaken to date, in selected countries.

Additionally, the objective and format for Valuing Water are directed not just to the children, and youth, themselves. An important add-on dimension has to do with the context and other stakeholders concerns, which typically refers to their school, or the environment in which the training takes place, as well as their teachers, other personnel and those responsible for the educational setting.

The workshop series “Valuing Water” has been devised in sync with methodology which has proven helpful and effective for this kind of training and communication. Each workshop is prepared, executed and followed up on with the help of approved “moderators”, which have accepted as capable of serving as “mentors” for the participating school children/youth. The process for guiding and guarding the outcomes in this respect are managed by the Secretariat of Water and Humanity. As the programme keeps evolving, however, with an anticipated pick-up in the number of workshops, interactions with stakeholders and the development of new formats for applying the method and pursuing the objectives at hand, a strengthening of the organisational support structure is envisaged.

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<sup>1</sup> This document sums up the basic approach to, and experience thus far on, the Water and Humanity Workshop model and series, “Valuing Water”. The authors wish to thank all who contributed to developing the activity and who have taken active part the various workshops.

The methodology is further arranged based on processes to arrange with a “personal” connection for the children, as well as to work out a way of starting out “local” and then gradually widen the horizons. The typical method is to review past practices how to manage water, in its capacity of always having served as a critical resource, through history, and then compare with the situation today, and where we are heading in the future. Through this journey, the workshop format is arranged so as to mobilise individual as well as group effort by the participants, collect ideas and proposals from youth what we can do better together, and also how they wish to be involved in the next steps.

Following a review of the initial workshop as well as the 2<sup>nd</sup> round of subsequent pilots undertaken in four countries, this brief document further outlines the fundamentals of our approach. Here, two fundamental, partly opposing aspects are at work:

i) One has to do with the importance of adopting certain procedures in order to fulfil basic requirements deemed necessary for success. This includes, for instance, the importance of placing the children at the centre of the exercise, include personal elements, stimulate interactivity and promote creativity. Additionally, certain conditions need to be fulfilled in regard to *process*, including the arrangement of follow-up as a mandatory element. Another set of considerations have to do with regulatory and ethical standards, including those imposed by the strains and risks associated with the COVID-19 epidemic during much of the implementation period.

ii) The other has to do with the need of adapting the approach so as to be able to meet with specific challenges which may vary from case to case. One of the important factors to take into account has to do with the age of the participating children. Young children should generally be introduced to the topic with stronger connection to their immediate neighbourhood, while the geographical area used to provide context can be wider for older one. Conversely, however, the effective engagement of older children/youth, typically requires an opportunity for them to become properly prepared, an aspect we will come back to. Other factors coming into play include the cultural context, the profile of the moderators, some organisational aspects such as the time and facilities available, and so forth, as further noted below.

## 2. Initial Workshop: Oman, Nov. 13, 2019

The initial workshop was held in conjunction with the launch of Water and Humanity, at the National Museum of Oman, on November 13, 2019. Azza Al Maini from the National Museum of Oman and Ingrid Andersson from IKED, Sweden, prepared the workshop by inviting the facilitators and making arrangements with the school administration. Two weeks prior to the

event, they coordinated between them regarding the precise methodology, key aspects of the workshop flow and the timelines.

The children who took part were 7-8 years old. Initially, they were introduced to the lecturers and facilitators. The main speaker was Prof. Abdullah Al Ghafri of Nizwa University, one of Oman's leading experts on traditional water management, the Aflaj Water System. He was supported by colleagues and assistant mentors from partners in the Water and Humanity secretariat and network, including Hashil al Hatmi from the Organisation for Quality and Innovation Strategies (Qualies) and professor Guido Ferilli from IULM, Milan, Italy. The team held a low profile though, as their main role was to observe and support with coaching and facilitating to the extent a need for that would arise among the children.

Considering the young age of the children, Prof. Abdullah Al Ghafri started his lecture by telling children about his village and his family. He made it personal as a way to connect and inspire the children to connect with their neighbourhood and families.

**Figure 1: The initial School Children Workshop “Valuing Water” at the Learning Centre of The National Museum of Oman, Nov. 13, 2019**



He further exemplified how water serves as the fundament for life, and as a unifying element in human relations. In this, he spoke of water in everyday life, e.g., giving water to our plants to make them grow and produce food. From there he made the connection to the traditional Omani irrigation, the aflaj system, how it works and the ecosystem it maintains. Throughout his presentation, Prof. Abdullah actively asked short and straight-forward questions which inspired the children to share stories, generate more questions and remarks, making the session increasingly interactive as it went on.

The material presented to them was quite advanced, essentially the same used in lectures to university students of Aflaj. Through the presentation and the subsequent discussions, the children were intensively inspired by material that many 20-year olds find out-dated and not

relevant in the present context. Following the presentation, they were encouraged/invited to compare the past with the present, and consider the consequences of where we stand today, and what may be done about it. The Omani children again responded with intensive creativity and presented concrete proposals. They also produced presentation material to illustrate future steps of action. Their reflections on the present, documented in paintings were insightful and rich in content.

Some of the outcomes and solutions that the children displayed in their drawings include:

- How can we preserve the valuable ecosystem which is embedded in the aflaj including the birds, insects, reptiles and plants surrounding the aflaj;
- How can we learn more about the social structure, i.e. sharing of water resources as being traditionally done in the case of aflaj, and;
- How can we save water and reduce the consumption of water by learning more about the history of aflaj.

**Figure 2: Drawings from the Muscat Workshop**



### 3. Experience of 2<sup>nd</sup> Round Workshops

Building on the experience of the initial workshop at the National Museum, partners of Water and Humanity in other countries prepared and executed a 2<sup>nd</sup> round of workshops. The organisers had been part of the thought-process behind the concept, as well as the assessment and strategy work undertaken after the first event. All had a connection to URBiNAT as well, and thus benefitted from exposure to the participatory methods under development in that project too. In all cases, they made clear the arrangements would stay clear of legal and bureaucratic issues. Separate meetings were organised with teachers and school management, providing them with the opportunity to take active part in following up and reflecting on the arrangements and their aims. This was of high importance to ensure positive links to the particular school and local environment. Finally, experienced mentors

were present and engaged to provide active learning support, especially to back teamwork along with buy-in from the lecturers-teachers in the various cases.

As a result, in fundamental respects, all the 2<sup>nd</sup> round workshops entailed a similar structure and dialogue. At the same time, the organisers were given free hands, even encouraged, to adapt the precise set-up, procedure and content, to what would be most fitting in the specific case. This was strongly encouraged, in order so as to enable experimentation and the build-up of diverse lessons and insights. In the following, we provide a brief summary of each 2<sup>nd</sup> round workshop (overview in Table 1) along with observations and tentative analysis of the outcomes and lessons learned.

**Table 1: 2<sup>nd</sup> round workshops (December 2019 – September 2020)**

Country / City	Date	Age	Moderator	No. of children
<b>Iran / Kerman</b>	a) 24/12/19	3-6	Dr. Azimeh + Iman	16
	b) 15/1/20	7-11	Dr. Azimeh + Iman	26
<b>Germany / Hamburg</b>	a) 10/01/20	10-11	MBA Oler	25
	b) 10/01/20	15-16	MBA Ohler	15
<b>Italy / Bologna</b>	a) 15/01/20	4	Prof. Ferilli	21
	b) 15/01/20	5	Prof. Ferilli	19
<b>South Africa / Soweto</b>	03/09/20	15-16	Andile Khoza	15
<b>South Africa / Mayfair</b>	14/09/20	10-16	Mongezi Madlala	30

### 3.1 Kerman, Iran

The two workshops were undertaken under the leadership of Dr. Azimeh, a child development psychologist and member of the World & Humanity expert network, together with Iman, an expert in water and irrigation and the executive manager of Mahan Clinic in Iran. Initial preparations were undertaken in consultation with the preschool and school administration of Kerman, Iran. The selected schools received detailed information on the objectives and structuring of the workshops about one week before the execution.

#### *a) Initial workshop, Dec. 24, 2019*

The workshop was held on Dec 24<sup>th</sup>, 2019 at Aftab preschool in Kerman, Iran. 16 children, aged 5-6 yrs. old, took part. It was structured around four steps:

- **First step:** Brainstorming about what treasure may hide in the middle of the room, where a glass of water had been placed under a towel. The preschool children guessed about money, gold, food, toy, candy, sweets, and so on. When the true nature of the treasure was disclosed, Azimeh reasoned around the importance of water in daily lives and the link to life, and humans. The children took part in the conversation and opened up to inform about usage of water in their homes, such as washing, preparing food, drinking, planting, and so forth.

**Figure 3: Start of initial Workshop, children 5-6 yrs. old, Kerman**



- **Second step:** The cycle of water on earth was explained to the children and they observed the experiment of water vapour and changing to water in the classroom. They observed the hot water in pot and vapour in it, how vapour changes to water if a cold plate was put on the pot. They reasoned around the water cycle in sea, river and clouds, clearly understanding it well.
- **Third step:** Considering problems with management of and access to water, the children discussed with Azimeh about old and new ways of water preservation. They talked about good and bad usage and what they themselves, and also others, can do to ensure improvement.
- In consideration of the limitations in the exposure thus far of this age group to traditional practices in water management, the children were encouraged to make a pot with clay (mud). At this stage, Azimeh explained the old ways of water preservation. After washing their hands, the children returned to the classroom for snack time. They ate a sticky cake prepared specifically for this occasion. As they were now encouraged to clean their hands, the pipe water was closed, and they could not wash their hands. After 10 minutes, working with the mentors they found a solution to clean their hands, and had gained a lesson about the importance of water and, also, of ways to reduce water consumption.
- **Fourth step:** Painting with pastel and pencils, the children developed and displayed their thoughts on the importance of water and its usage. The somewhat chocking experience of stage 3 had sharpened their minds, and the children were now even more concentrated, and deeply inspired. Most of them related to the cycle of water and how it flows under natural conditions.

Figure 4: Fourth step, Workshop for 5-6 yrs. old, Kerman



*b) Follow-up workshop, Jan. 15, 2020*

A follow-up workshop was held on Jan 15<sup>th</sup>, 2020 at Reyhaneh School in Kerman, at elementary level. Twenty-six 5th grade students (11 - 12 years old) took part. The arrangement followed partly the structure of the initial one, with the four same steps applied. At the same time, adaptation was made taking into account the children's age, and based on observations in the first event, what worked well or less well. The results of the two were then compared, allowing for a richer set of lessons from the two combined.

- 1) The opening followed was similar. Azimeh was introduced, after which she introduced the hidden treasure to the children, equally effective an ice breaker this time. The students had more guesses now, such as: a letter, painting tools, books, air, headphone, an animal (pets such as hamster, kitty, dog and etc.), flower, hat, food (chips, candy, burger, ...), diamond, crystal, toy, Lego, keys, watch, lipstick, eyelash, nail polish, money, gold, time (minute, seconds...), snow, rain and, finally, one of them guessed "water".



**Figure 5: Treasure revelation, follow-up Workshop 7-11 yrs. old, Kerman**



2) The ensuing discussion resembled the previous one. Then, Iman explained about the workshop purpose, this time using a power point presentation, explaining;

- Need of water in the body;
- Drinking of water every day;
- How many days can a person live without water?
- Usage of water;
- Food and water content, e.g. comparing a cucumber with tomato or French Fries..., and
- The water cycle and human usage and Control ways in the past and now.

**Figure 6: Leading on from treasure experience, Workshop 7-11 yrs. old, Kerman**



3) This was followed by each child obtaining pottery, to touch and recognize its role in the past to protect drinking water, and also about ancient urban water supplies and irrigation systems. They made objects with the clay, after which they needed to wash their hands. Similar to the first workshop, they now faced a challenge wash their hands since the water pipes had been closed. For 10 minutes they faced a stressful situation, some panicking, crying and running around the school yard searching for water. They checked every bathroom inside the school including the teacher's bathroom without success. Eventually, the school directors opened the pipe slowly, so they were able to wash their hands. The children cheered and were so happy that they had found water. As they were then asked to talk about their feelings

and emotions, they gradually understood what they had experienced. They stated their feelings as: sadness, nervousness, feeling dirty, excitement, madness, fear, anger, fury, attractiveness.

**Figure 7: Using pottery, Workshop 7-11 yrs. old, Kerman**



Then they watched a short movie and also a power point presentation about the groundwater cycle, gaining knowledge about springs, wells, founts, flumes and also water purification systems. They discussed about refinery and distribution of water. At last, they reflected on the importance of water and the ways to reduce the daily usage of water and optimization of water consumption.

4) Finally, the children started to paint, expressing their thoughts and feelings in drawings. They drew usage of water in the environment and ways of optimizing water use. They expressed their happiness of being granted with their opportunity to have learned the value of water and further develop their insights.

**Figure 8: Painting, Workshop 7-11 yrs. old, Kerman**



For the four main activities, applied in each case with the age group taken into account, the main conclusions may be summed up as follows:

- 1) The treasure game, was equally effective for both groups as an ice breaker, although with richer result for the older group;
- 2) The methodology was adapted to the age group. For the older children, their stronger technological base was made use of for greater depth in approaching water-related challenges, with use of power point presentations, a short movie, and digital tools such as tablets. They were also granted outright responsibility for jointly designing the project;
- 3) The experience-part was elaborated a lot more for the older children, taking advantage of their greater ability to interpret others' emotion and greater awareness of emotional display;

4) Both age groups were inspired by using art, with the younger particularly creative. Already at that young age, many of the children have great ideas how to save water or use local resources. At the same time, they face greater problems how to formulate their ideas, and thus they need more active coaching to fulfil their great potential. They are particularly responsive to a rich set of art materials, puzzles, games suitable to involve young children.

### 3.2 Hamburg, Germany

Two workshops were arranged in the German city of Hamburg, on 10.01.2020

- Workshop with 5th graders (10-11 years old)
- Workshop with 9th graders (15-16 years old)

The school hosting the workshops is located in a suburban area of Hamburg.

The main preparations were as follows:

- Initial conversation with the school principle on the methodology, objectives, and execution of the workshop;
- Presentation of the Water and Humanity conference and the connection to the Youth Workshops to the school principle and the respective class teachers (5<sup>th</sup> grader's and 9<sup>th</sup> grader's class);
- Preparation of step-by-step plan for how to conduct the 90-minute workshops (introduction to topic, brainstorming exercise, group work on posters, presentation and discussion of posters);
- Allocation of material, such as blank posters, IT equipment, and writing material.

The content was structured basically in the same way for the two age groups, with general outline as summed up below.

#### Workshop structure in the classrooms:

##### 1. Brief presentation of workshop purpose and goal

- In order for the youngsters to understand the purpose and goal of the workshops, the moderator informed about the context, the youth workshop that had been arranged in Oman in November and reflected on examples of other somewhat similar activities. This way, the children and teenagers were able to sense that the workshop fitted into a bigger context and also that their contributions would count and be picked up in future processes in support of Water and Humanity.

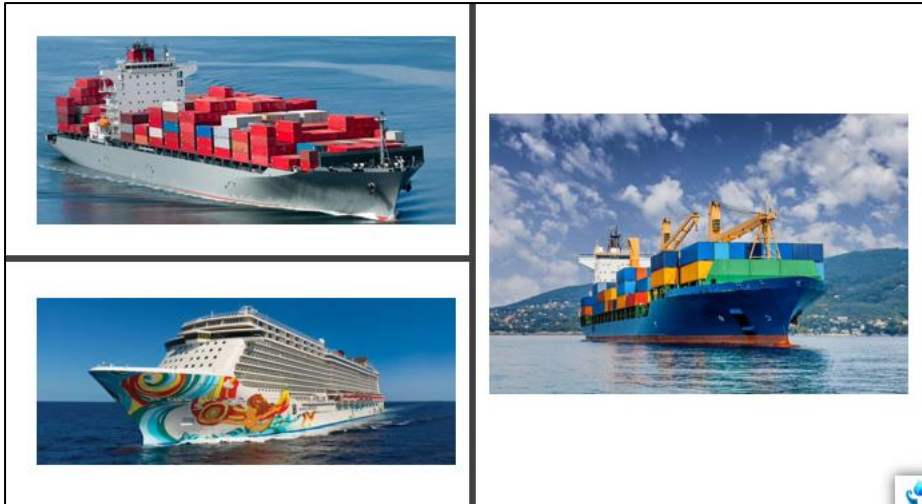
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##### 2. Introduction of water

- The moderator introduced the topic of water by talking about the following:
  - Meaning of water, e.g. in the daily live, for free time activities and in your neighbourhood,
  - Water as a natural resource and essence of life,
  - The danger of water scarcity (wildfires, draughts) and water pollution (carbo and cruise ship industry),

Figure 9: Presentation material, Workshops for youth, Hamburg





### 3. Brainstorming exercise

In order to spark ideas and initiate group conversations, the moderator confronted the children with more personalised questions:

- What does water mean to you?
  - Why do we need water?
  - What forms of water are you familiar with?
  - Where do we find water?
  - How do we use water?
  - Why is water so important and how can we use it more wisely?
- The purpose of this exercise was to use the resulting answers and ideas and project these onto posters.

### 4. Working on posters in groups

- Projecting associations with water on posters, e.g. alternative ways of water management, importance of water, more sustainable ways of using water, water in different forms, water as the essence of (human) life etc.

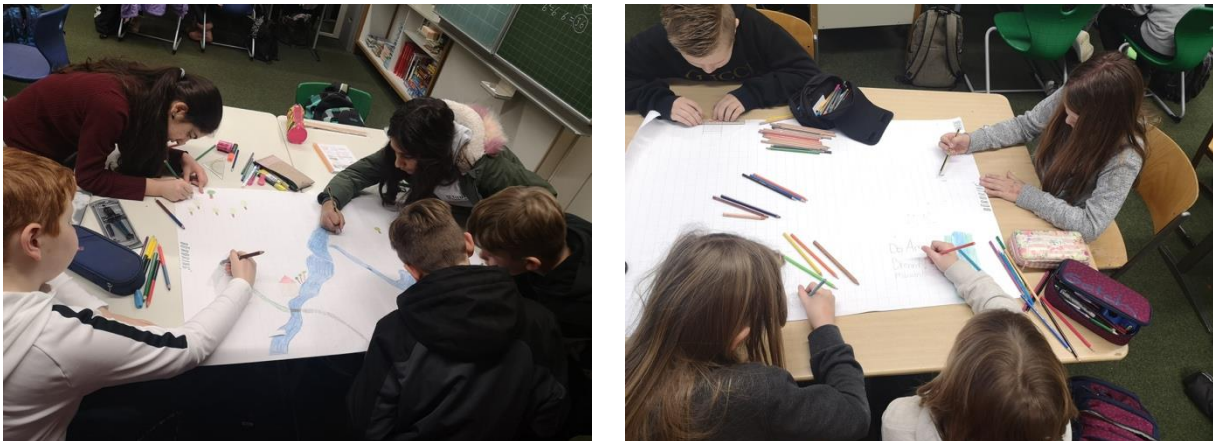
### 5. Presentation of posters in the group

- All students gathered around each table to listen to every student presenting his/her ideas in connection with the topic of water;
- The groups were supposed to create a common overall topic in each team. Not all teams created one overarching topic, but the ones who did were able to bring their points across in a more structured way.

### 6. Discussion of poster outcomes

- Plenum discussion how the ideas created in the workshop could be used to help improve water management and reduce water waste. Several students (both 5<sup>th</sup> and 9<sup>th</sup> graders) suggested to bring together policy makers from all over the world to join forces in tackling water-related challenges that affect all countries (flooding, draughts etc.) and indirectly (climate migrants fleeing their home countries). Other ideas were more related to the practical use of water on a daily basis.

**Figure 10: Photos, Workshop with 5-graders, Hamburg**



Turning to the outcomes, the creations of the workshop for 5-graders can be summed up in the following way, with the 5-graders:

- Demonstrating how they make use of water in the context of daily routine, and how easy it is to access water in their homes. They also compared their experience with other parts of the world, e.g. Africa, the Amazon, and Australia. They drew forest fires and a picture of a man in Africa walking 400 kilometres to the next well;
- Drawing a picture of the globe to show how much of the world consists of water. One girl drew a human and showed that 70 % of the body consists of water;
- Illustrating the “water circle” (rain that falls into the ocean and then evaporates again through sun power to get into the clouds);
- Developing ideas how to save water by having a time clock at the shower that allows you to only shower for 5 minutes;
- One group focused on addressing the government and everyone to donate money to help Australia and the Amazon;
- Another group drew a riverbed to show how one little village is connected to a bigger city by a big river and how the river is providing everyone with water. They further demonstrated that water enables forests to grow and mills to be working at the river. They also drew windmills.

**The outcomes** of the workshop with 9th graders featured:

- Three different posters;
- The first group was presenting an idea on how to use the melted water from the poles to provide deserts areas of the world with water and to enable plants to grow there. He drew a pipe that would lead the water from the ocean to the deserts. The same group also drew a big riverbed;
- The second group drew a monopoly boardgame that was water themed. All the fields were prominent water-related street names in Germany. There is a heart field where you can find a lot of water, which is called Germany and there is a going-to-

**Figure 11: Outcome, Workshop with 5-graders, Hamburg**



prison field, which indicates a very arid area and they called it Africa. You can buy the harbour in Hamburg in this game and you receive a water bottle when you pass “go”;

- The third group focused on the states of aggregation of water. They drew water as a solid form as an iceberg, fluid form as the ocean, and gaseous as clouds.

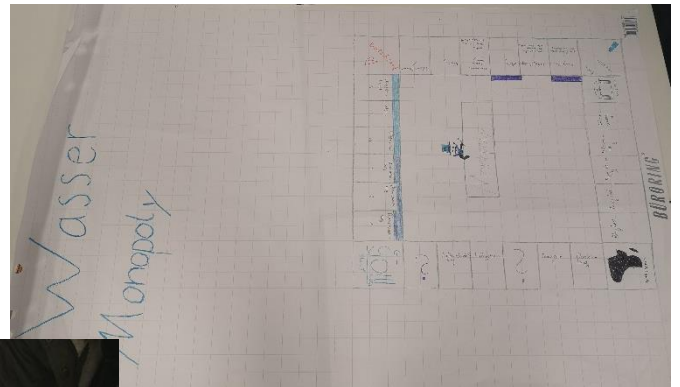
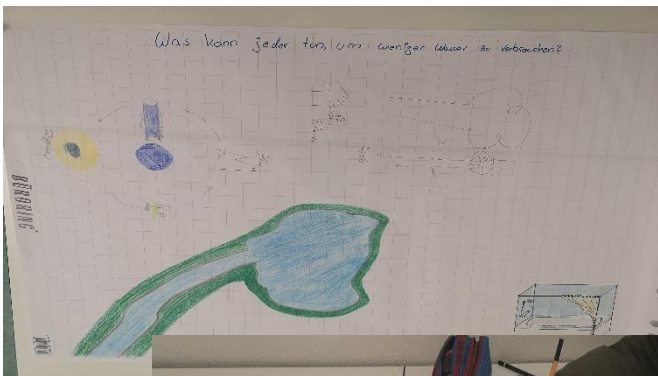
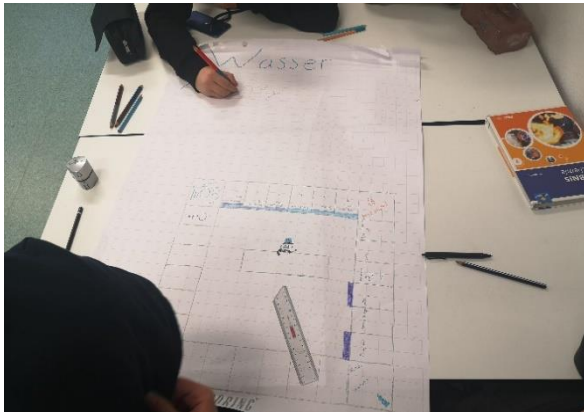
### Comparison

The application of a very similar approach and the presence of the same lectures and mentors (although the teachers present as observers, were different) allowed for an effective comparison what unfolded and what was the outcome of the two workshops. It turned out that the result was quite one-sided. In a nutshell, the 5<sup>th</sup> graders were a lot more active, focused and creative through the process of constructing water posters. The 9<sup>th</sup> graders had trouble letting their imagination run free and to make drawing. One interpretation is that the elderly became distracted by the situation and set-up. Another is that the actual set-up was more suitable to the younger cohort.

This shows us that the methodology must be adapted to the age group. For example, older children could receive a task that is focussed on creating more advanced technological solutions to water-related challenges, such as water scarcity and water pollution. Their task could be to create a power-point presentation or a physical model of their solution, e.g. by using digital tools and building material. Drawing tasks are not advisable, since many



Figure 12: Photos from work by the 9-graders, Hamburg



teenagers perceive it as too childish or simply have forgotten how to draw. The methodology used in many schools after a certain age group is to memorize, use digital tools, such as calculators and computers, and to work in a problem-solving manner. Unfortunately, by using technological assistance the creative part of the brain is often not stimulated. With young children, on the one side, we can work more freely and creatively. On the other side, we must be careful in also staying problem-solved oriented. Many of the children already in this age have great ideas on how to, e.g. save water or use local resources more efficiently, but we must be more explorative in listening to their ideas, even if they seem farfetched. Many of them have great potential.

### **Lessons for future workshops**

The most efficient strategy to use going forward would be to set up a **Guideline for Youth Workshops**. The guideline will serve as a supporting handbook on how to conduct youth workshops with different age groups. It is crucial that the methodology used is tailored to each age group. For example, children under 12 years old are more accustomed and comfortable with using their imagination through playing games or drawing. Whereas teenagers over 12 years are entering a phase of wanting to be seen as adults and view drawing exercises as too childish, or they have been taught to use other learning methods and forgot how to draw. Either way, it is advisable to approach the youth workshop with teenagers in a different way.

Teenagers must be stimulated with other incentives and brainstorming methods. In my experience, there needs to be a short-term and long-term goal. The long-term goal could be to combine all youth workshops in a worldwide conference, announce the best ideas created and implement them into a new Proposal for Action Document. This way, all participants of the youth workshops are incentivised to produce tangible water-related solutions to the world's most pressing challenges. The short-term goal in the local workshop would be to win the classroom competition. The best idea will be presented at the international conference of youth workshop. This approach would motivate participants to put more effort into producing ideas and solutions for some of the challenges connected to water. Teenagers can use technologies, such as computers and power-point presentations to illustrate their ideas. Another idea would be to provide building materials for teenagers to create prototypes of their solutions.

### **3.3 Bologna, Italy**

The workshops for children in Bologna took place on January 15, at the primary school Federzoni, in the Bolognina district of Bologna. Italy. Two classes were involved. First, in the morning, the first workshop was held with 21 four-year old students. Then, in the afternoon, the second workshop involved 19 five-year old students. The workshop proposal was discussed with the school beforehand, and very much welcomed. In Bologna, public preschools have recently initiated a collaboration with the public service supplying water to

inhabitants, in support of sustainable water usage for households. A workshop developing children's knowledge of this precious resource was thus viewed as timely and well in line with the general strategy for the school. As another feature, the majority of children in the chosen school are not of Italian origin, increasing the need of activities that can help foster a sense of inclusion.

### **Programme implementation**

The workshop was implemented using a similar format in both workshops. The mentors were the same, but the teachers were different, as they were the ones belonging with each class.

Considering the young age of the students, it was judged important to use images and videos intensively, so as to help illustrating various aspects of the topic. It was felt important and meaningful to introduce and explain various declinations of water, physical, chemical, social, economic, historical, artistic, urban. In this way, the children's curiosity was stimulated. It did not take long for them to become strongly involved and very active. They constantly asked questions and readily made references to their own personal experience.

The approach was inclusive also with regard to the teachers, inviting them to feel part of the arrangement. Thus, the introduction as directed to the full class, including both the students and their teachers

At the start, a brief recapitulation was made of the workshop in Oman. Pictures from that occasion were shown. The theme of water was then introduced, with different usage illustrated by photos and pictures, underlining diversity, calling attention to both positive and negative experiences of water. The emphasis was gradually placed on water in daily life. Finally, the presence of water in Bologna was highlighted. It was explained what the water had meant in the past, connecting with nature, history, geography.

These presentations were followed by brainstorming with the children, who were able to reflect and make various associations what water meant to them.

The students were then invited to undertake individual work to produce posters. At the same time, they discussed and exchanged ideas between them. The mentors were active, listening in, asking questions. As everyone got together again, the children presented the work they had undertaken, showing and explaining their posters. Other children could comment, ask questions, reflect further.

A snapshot of presentation material from the workshop for 4-years old is seen in Figure 13, and for the 5-year old in Figure 14.

Figure 13: photos and illustrations, Workshops for 4 yrs. old, Bologna



### **Outcome, 4-years old**

The 4-years old were very curious from the start and delighted to discover the presence of water in every aspect of daily life. Many drew water as a means of movement, transport, and some depicted recreational purposes. Some drawings seemed to illustrate how all people need water, irrespective of age and variation in personal attributes. Further, the children turned learning into a personal experience in which water was drawn together with elements of design that they see in their family life, or by including friends, relatives or everyday objects relating to the subject of the workshop. For example, a little girl from North Africa designed a swimming pool with the colours and shapes of a precious jewel typical of her country, as if to emphasize the importance and/or beauty of water. One drawing shows the family members together, when they come in contact with water.

An interesting aspect is given by the fact that the students devised their images of water, even those that represented a trauma, such as the case of a tsunami, in drawings that were always positive. They expressed great appreciation for the workshop and, for several weeks afterwards, turned to the teachers for more information about water.

The teachers similarly expressed their sense of positive experience from the workshop and about the insights they gained about the role of water in the local context, and how that can be used for educational purposes.

### **Outcome, 5-years old**

The students of 5 years old embraced the workshop as a sort of game. Each child was inspired and there was a strong tendency among them to ask for more information and/or express their personal knowledge and opinions. They discovered the importance of water and the way human existence depends on it.

The teachers expressed surprise over the reaction of the students and how the impact of the workshops lingered. They, too, rediscovered the role of water for Bologna over the ages and, a few weeks after the workshop, decided to visit - with the students - the location where the city's ancient construction for water remains visible.

Drawing and painting worked out very well as a suitable means for the children to express themselves. For older children, above the age of 12 years, it was anticipated that other means, such as using more advanced technologies and social networks, could also have worked very well.

The school has expressed great interest in this initiative. They would like to publish the results and future developments in the local press. They would also like to come into contact with similar international experiences for the exchange of experiences and good practices.

Figure 14: photos and illustrations, Workshop for 5 yrs. old, Bologna



## 4. A New Generation of Projects

Following the second round of projects, a new mission was pursued in collaboration with partner organisations in South Africa. Ahead of this, a dialogue between the Water and Humanity Secretariat and the organisers on the ground, identified aspects importantly requiring consideration, to gain further insight of key success factors. These spanned three main categories:

- i) Influence of culture, social background and gender;
- ii) Organisational aspects relating to content and workshop modality;
- iii) Administrative considerations, how to raise interest and build the support among key stakeholders.

These are to be returned to in the last chapter.

Next, we provide brief background to, and reporting from, the workshops carried out in South Africa in September and November 2020.

### **Overview**

In order to focus on areas confronted with challenging economic and social issues, but still allow for testing of alternative approaches as a basis for lessons what works best under the conditions at hand, two workshops were planned for in low-income suburbs of Gauteng province, South Africa, namely Soweto and Mayfair. The first, in Soweto, took place on September 3, 2020 at Kwadedangendlale High School, engaging high school students at 15-16 years of age. The second, hosted in Mayfair on November 14, 2020 at Bophelo Impilo Community School, featured a wider mix of students, ranging between 10 to 16 years of age, thus including students in primary school as well as high school level.

The planning and execution of these workshops were significantly constrained by the COVID-19 pandemic and associated regulations put in place by the South African government following directions from the World Health Organisation (WHO). This affected the number of students who could be assembled to take part in the workshops as well as the direction of time they could be available, as their schedules were re-planned in order to comply with requirements such as the rotation of grades attending on campus on specific days. For instance, students from grade 8 and 10 could only attend classes twice in one week and on three days in the ensuing week. Students in the other grades involved could attend on the days the above-mentioned grades would not attend, and so forth. Additional measures had to be undertaken to adhere to requirements of social distancing in classrooms and on campus, and to ensure all students sanitised continuously and learned in a safe environment.

Similar procedures for planning were followed in the two cases, involving the following main steps, in roughly sequential order: i) Drawing on the connections of the organising parties, contacts were initially taken with the principal of each school. The main modes of

communication were by email and WhatsApp. The context as well as main objectives and requirements were conveyed and any questions for clarification responded to; ii) Over a period lasting from a few weeks to approximately 2 months, the set-up was agreed and confirmed; iii) The dates and precise time for arrangements at each campus were discussed and agreed on; iv) The selection and practices for arranging with support materials to be applied at each school, such as mobile-whiteboards, pens, colouring pencils, poster paper, markers and many more, was agreed and executed, and; v) Considerations of COVID-19 regulations and how to manage the schedule of students in each grade, while part of the preparations from early on had to be finetuned right up to just before the dates of execution, in the light of changing rules and lingering uncertainty.

Below is a breakdown of the costs related to planning and executing the workshops in Soweto and Mayfair. The local organiser, Vertex Ecosystem, covered the costs as a pilot project under their bespoke Impact Series. The success of the workshops is now being circulated to various sponsor targets, who will support plans to repeat workshops in additional communities in time for presentations at the Water and Humanity Summit in Oman.

Costing of workshops: Total \$80 per workshop

- Phone stands x2 (phones have significant filming quality, with one phone moving around) - \$20;
- White board - \$15;
- A3 papers, pens, markers, coloured pencils - \$10;
- Petrol for drive to Soweto/Mayfair from 4-Ways Suburb - \$20;
- Printing certificates \$5;
- Snacks and Drinks \$10.

Giveaways and awards;

- Certificates
- Hampers included free snacks (Ringo snacks) and sanitisers.
- Water Filtration system donated (Mayfair & Diepsloot) – Provides clean water for over 1000 students.

Additional costs:

- COVID-19 PPE (i.e., facemasks, gloves and sanitisers).

As a result of all students being minors, it was agreed that parents had to give prior consent. The procedure for this was managed by the schools. In this, the schools applied standard procedure, considered all aspects, notified parents as appropriate of an upcoming workshop, and left it for the respective parents to confirm whether their child could take part or should be excluded. This procedure was viewed as necessary since the workshop constituted extra-curricular activity, and also in the event that any accident would occur during a given



workshop (in the event parents would then not be aware, and not have actively given consent, the school would then in effect be liable for the damage). All communication associated with such matters was carried out and finalised beforehand, so that any doubts could be removed and those involved have confidence that each workshop was in line with any regulatory and ethical requirements and deemed fit for ensuring the safety of all the participating students.

It was observed that in both cases, the school principals selected students who they thought would best represent the school to participate in the workshops, rather than to engage entire grade levels. This way, the groups could mitigate overcrowding, social distancing concerns, and the need for a focus-group style workshop keeping attendance to under 20 students per session. In some cases, grade levels could have as many as 50-60 students. Therefore, students with the most enthusiasm and academic merit were prioritised at the discretion of the school's leadership. Resultantly, parents who were informed of this event were more likely to encourage its proceeding, and there was no refusal of consent received.

A cultural factor may be noticed at this point, whereby the respective communities approached this opportunity as a chance to showcase the school's 'best parts' in a way that assures observers of the competence of the school's faculty (maybe even more than the students themselves) while simultaneously calling for help. For instance, in preparations for the Soweto workshop, the principal emphasised a lack of technology such as PowerPoint facilities (computers and projectors) and power outages as something that the organisers could potentially resolve for them in the future. Additionally, while faculty stepped back to allow the workshop organizers to control the session with minimal intervention, there was not one single faculty member who inquired on the outcome of the practical segment of the workshop. No inquiry on which solutions to water insecurity were designed and presented by the students, and since it was done in competition style, little to no interest in what solutions the winning team provided.

In both Soweto and Mayfair's cases, the way that the organisers were received and sent off hinted at ulterior motives. Perhaps due to the overshadowing lack of resources at these schools, the faculty was less involved in the content of the workshop, and more focused on sidebar conversations around what can be done for the school thereafter. Requests to follow up and take the students to more events (such as a regional final between the best presentations of each host school) that could bring exposure were common. Vertex Ecosystem shared these concerns with various sponsors, and a consensus was made that this is not a negative observation, but rather circumstantial and attributable to the culture of the groups that were involved. So far, the schools were in predominantly low income, under-resourced, and under-represented settings. For future workshops in this context, the organisers determined that it would be beneficial to combine the educational aspect of the workshop with some goodwill – such as the donation of sponsored solutions (as seen in the case of a school Diepsloot, a third workshop is scheduled, as discussed later in this chapter).

## General Workshop structure

### Duration:

The COVID-19 regulations in effect set sharp limitations on the workshops. The organisers of the workshop had carried out a test-session comprising of 45mins, 60mins and 90mins in order to determine the most suitable time needed for a successful workshop to be carried out, by doing this it was then possible to arrange a time-slot for the workshop when communicating and planning with each school principal. The suitable period was 90-minutes which each school was okay with considering the new demands on schedules and the management of students' time as well (the Soweto workshop did go above 90-minutes with permission from the school).

The structure of the workshops was as follows;

1. The organisers introduced the subject of water, explaining its fundamental importance and relevance to the local community as well. The approach was simple and informative, and with a style of presentation suited for students to pay attention and build swift understanding. A fact and figures sheet was prepared and used to aid the presentation which lasted roughly 10 minutes.
2. Positive interviewing: students were asked stimulating questions: how do you use water? Where do you access it? How is water used by your community?
3. The duration of the interview stage was 10 minutes, this allowed to engage with the students and ensure they understood the presentation. The student's answers were written on a white board, arranged as a mind map with community water trivia, including quiz-like questions about the *availability of water, importance of water, etc.*
4. Transition into problem identification: ask students what are some problems they know about water? Reminding them of the opening presentation and using the mind map. The duration of this part of the workshop was 10 minutes.
5. Ask students what we should do about these problems. Who can help us to achieve this? This was done to gain insight into what the students regarded were solutions to the problems they were already facing and what they felt they would have done had they been in a position to assist. The duration of this part of the workshop was 5 minutes.

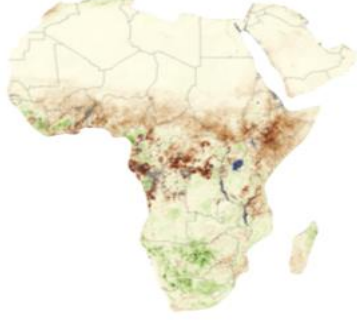
Figure 15: Slide nr. 1, from opening presentation on the importance of water

## Overview

Background information & context

### Water insecurity in Sub-Saharan Africa

- Water crises in the *Top 5 Global Risks*, ranking beside weapons of mass destruction.
- 58% of people in SSA have access to **basic** water supply (GIZ, 2017), while only 10% have access to **clean** water (Santos et al, 2017).
- By 2050 only 56% of urban dwellers are projected to have access to piped water; lower than levels in 2003 (GIZ, 2017).
- Investment & PPPs: Since 2001, virtually 0 public-private partnerships for water have come to completion (Bailey, 2009)



### Activity

Students were put into small teams where they were all briefed. Papers, drawing boards, pens, markers etc. were made available to each team of students where each team needed to illustrate their solutions. The duration of this part of the workshop was 30 minutes in total.

Each group was encouraged to structure its organisation including responsibilities to ensure the team completed their tasks. Additionally, monitors from the organising team bounced from one student team to the next, sharing ideas and probing them to think further. Monitors encouraged the students by asking what problem they are solving and challenging them to be as creative as possible; emphasising that there is no limit.

Each team presented and shared their solutions with the group. In Soweto, there were 15 students in total, split into 5 groups of 3 with balanced combinations of grade 9 and 10s. Each team was given 5 minutes to present. The second workshop, hosted in Mayfair, had 30 students participate, a much larger number than our previous session. The organisers split the teams into 5 groups of 6 students, with each team comprising students from the same grade levels. The same 5 minutes presentation time was given, and the organisers did not require all team members to present on stage.

\*Judges from the organising team presented immediate feedback to the participants, and after a short recess selected one 'best presentation' to award as the day's winner. The duration of the session was 5 minutes and included an awards ceremony. Certificates of participation for each team were presented with a special one for the winners.

The winners have been shortlisted for a future workshop to be attended by the winners of several schools who undertake the workshop in the Gauteng province (including the schools in Soweto and Mayfair). The organiser hopes to produce high quality, actionable, interventions to water insecurity at these future workshops, and to create a water ambassadorship program that includes bright students from the Water and Humanity community/network.

## **Outcomes**

### **Workshop 1: Soweto**

A total number of five (5) presentations took place with the Soweto students after the conclusion of the informational interviewing step. Comparably to the second workshop hosted in Mayfair, the students in Soweto produced stronger solutions but were limited by their presentation skills on stage. Despite being an older group, the students had clear insecurities about presenting in front of their peers and the organiser, and often times needed to be encouraged to continue their presentations. At this point it was apparent that perhaps due to age and academic program styles, the students were not so used to, and were especially uncomfortable to, working together in a sprint-style workshop of this nature. Most students demonstrated little creative chemistry with the others when presenting, but seemed to work well together during the preliminary brainstorming activities.

An influencing factor for this school's performance could have been the selection method used; to bring the most exemplary students out from different classes to participate as opposed to arranging the workshop with one single class of students. This meant that despite being a room full of similar-aged model students (according to the school's faculty), the group was largely unfamiliar with their new team members and/or the other participants in the room. Combined with the cultural pressure to impress the visiting organisers (superimposed by the school faculty), this could have made it more difficult for the students to produce and present solutions.

From an organisational standpoint, it could be argued that the age group engaged for this workshop would not be the best fit, too – not because of the content of the workshop, but because of the developmental stage of these students and their ability to perform within the parameters provided. For instance, a younger group of students (i.e. grade 4 & 5) will not yet be so rigid in their approaches to learning, and could find the format of this workshop more stimulating and easy to adapt to. Meanwhile, older students could already have established learning habits, school-time routines, and expectations within the academic setting that make this workshop an uncomfortable environment.

Baring these predispositions in mind, there were some more challenges that affected the success of students during the workshop. One such challenge was the language barrier. Despite the primary language of instruction being English, the students were not able to fully

articulate themselves when presenting. At the same time, some students admitted that they did not understand the prompt before the organisers split them into teams to produce solutions. Fortunately, a member of the organising team was fluent in the native languages of the students and assisted in translating during the presentations. This same organising team member had delivered the instructional portion of the opening presentation in hopes that he could best connect with the students. These issues also caused all of the presentations to run overtime.

This school also struggled with stationary and appropriate facilities for the delivery of presentations with slides. Without a projector, the organisers used a small laptop screen to show the relevant slides from the front of the classroom. While all students said they can see, not having a clear vision of the information being presented could have negatively affected the retention of key facts and figures. This reflected in the content of the final presentations, which could have also been vitiated by the lack of stationary in the classroom. If it were not for the stationary provided by the organising team, the students would not have been able to complete the creative process of this workshop. This implies that daily, there is little to no practice of creative problem-solving through poster making, crafts, or slideshows. The students were therefore not so proficient in the themes of this workshop, and furthermore inexperienced with this approach to learning.

it should also be mentioned that for South African students in the public education system, at this age group, the curriculum focuses on written examinations as the predominant (and in many cases the only) form of assessment. In fact, presentations only appear in the prescribed assessment criteria for 5 out of 34 subject areas detailed in the South African Basic Education Schools Based Assessment Requirements for Grades 10-12 (2020). Altogether this has an adverse influence on the quality of the presentations, as well as the quality of responses to the prompt. The solutions that the teams presented were largely devoid of creativity and innovation, besides one team who designed a novel pollution capturing system. Instead, most of the students presented summaries of the information that was already presented by the organisers, along with the risks of unsustainable water use and some of the coping methods & adaptations taken by their respective sub-communities (i.e., family, neighbours, township 'extension', or district).

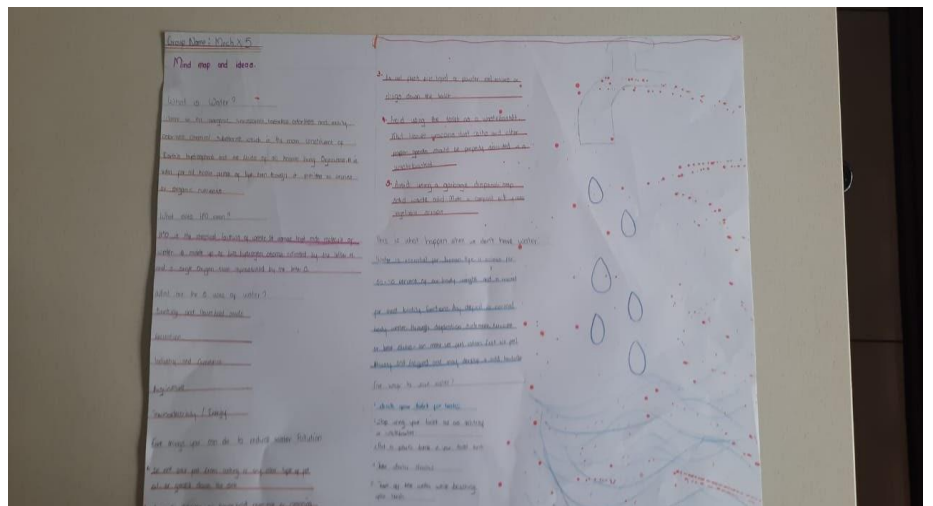
### **Workshop 2: Mayfair**

A total number of five (5) presentation took place with the Mayfair students, where there were a total of 30 students who participated, placed into groups of six (6) students. The grades were kept together. Challenges included the fact that this workshop included a younger group of students and was much larger than workshop now, students had to be guided during their presentations and organisers had to be firm in order to stick to the workshop timeline. Despite this limitation, this group of students performed very well, arguably better than the group of students in workshop 1, featuring quality presentations and novel ideas.

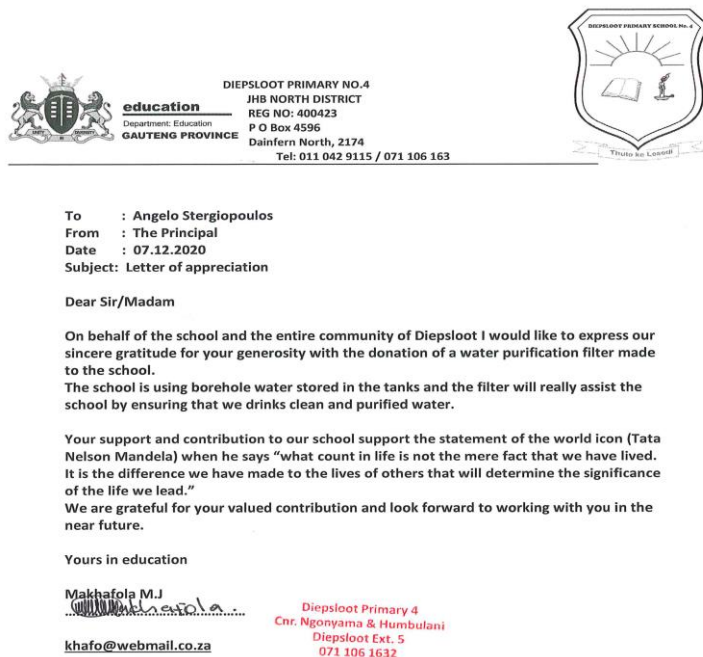
Figure 16: Photos from first workshop (Soweto)



Figure 17: Photos from second workshop (Mayfair)



**Figure 18: Letter of Appreciation from Diepsloot Primary No.4**



A third workshop, planned for mid-November 2020, had to be postponed due to COVID-19 concerns. The school, Diepsloot Primary 4, is a primary school situated in one of South Africa's most densely populated townships. Unfortunately, the organisers were unable to complete the workshop as scheduled but were able to work with one of the Vertex Ecosystem's partners, H2O Nero, to donate and install a free water filtration system for the entire school's water supply. Until this point, the school's running water was significantly threatened by frequent sediment and metallic build-ups. This intervention offers an inexpensive safeguard against children drinking this unfiltered water, while the organisers intend to use the workshop as an opportunity to educate the students about water purification, conservation, and distribution methods that they could campaign for at home.

In addition to this planned workshop, which is now planned for the 2<sup>nd</sup> term of 2021, or alternatively spring 2022, the organisers have been invited to observe the follow-up installation and replacement of filter pieces by the donor, as well as the donation of a new library for the school, in preparation.

## 5. Fundamentals to the Approach

The experience of the first workshop on "Valuing Water" in Muscat on November 13, 2019, as well as of those organised in the second round between December 24<sup>th</sup> and January 15, 2020, generated a number of useful observations, lessons and insights. As these were

compared and further assessed in follow-up discussions, partly arranged on-line. An example is the expert meeting hosted by Water and Humanity in Muscat on February 6<sup>th</sup>, 2020, as a thematic workshop which partly featured present experts and partly participants taking part on-line. Those present included those who had been responsible for and served as mentors in the first and second rounds of workshops (only the mentor from Kerman was not physically present but had produced an instructive video documentation). Additionally, the telco was attended by representatives of international/national organisations and networks, that bring together youth for related purposes, so to consider and explore openings for collaboration and scaling of the workshop approach through extension by partnerships<sup>2</sup>.

In this way, the programme development is taking inspiration from experiences of past training programmes and related activities. On this basis, the following six tenets currently serve as the point of departure for taking the Workshop series forward:

- 1) When encountering an opportunity to consider the value of water, put forward on terms that invite them to be active, learn and reflect on the various implications of how we manage water, ranging from the personal to the “big picture”, the vast majority of children and youth respond constructively, with enthusiasm and creativity. The experience of all the workshops undertaken to date demonstrates the validity of that notion, and how it can be built upon for a positive and rewarding experience for the children both individually and collectively, as well as for the moderators, teachers, and other actors involved.
- 2) Such a workshop should be ambitious in taking account of the great resourcefulness of water as relevant in so many ways, to nature as well as to all people, and build on that to raise interest and bring children and others together in a joint learning experience.
- 3) The link between history, the current situation, and what we can expect in the future, stands out as universally relevant and effective for engineering reflection of water management as universally important. This can effectively be linked to the cross-border dimension, that water is shared, with its usage in one place affecting also others, across borders. We are all connected through water.
- 4) The importance of making water “personal”, to connect local neighbourhood, family, with everyday life. The workshops greatly benefit from using tricks that make people sense that water matter to them, right now, including by surprising them – confronting them with a challenge and an aspect of water’s value that they had not thought of, but where they had taken water for granted.

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<sup>2</sup> Participants included: i) the coordinator of the World Youth Parliament for Water, for the Middle East, based in the Netherlands; ii) the founder of the World Youth Summit, South Africa, and; iii) the founder of Move Green, Oman. Others contributing to the process brought the experience of youth workshops at the World Economic Forum in Davos and of participatory processes in European projects.



- 5) The great power of interactivity; the opportunity to ask questions, respond to questions, take own initiative in thinking through and giving examples, including in teamwork, helps inspire and underpin the experience that water is valuable.
- 6) Similarly, the use of expression through art, whether in the form of drawings, modelling in clay, or – as witnessed in related exercises – using music, singing songs, etc., further deepens that experience.

While the above points are viewed as more or less universally prevalent, it was agreed as well that certain factors nevertheless influence the degree of success/the path to get there, in the individual case:

- The age of the children matters in several ways. Based on observations from the workshops we identify three main age groups: i) from very young to 6; from 7 to 11, and; from 12 to 17.
- At the opening of the workshop, most children are somewhat reserved and hesitate to be active. While personality matters a lot, shyness is typically less of a factor at young age, in fact for the categories i) and ii). Lack of experience in addressing such a subject, and also to be invited for such active interface, may be a factor though, for all age groups. For the older children, however, reservations tend to be grounded mostly in scepticism – who are these people, what is it for them and what is the purpose? Why are we doing this? For older children, who come from less privileged backgrounds and attend under-resourced state schools, this scepticism is exacerbated by an unfamiliarity with this approach to learning.
- How long the initial hesitation lasts is much dependent on the ability of the mentor to instil a sense of comfort, including trust in the situation, and with constructive exchange taking hold. Overcoming the problem of scepticism that follows from the older children's focus on the person (the mentor/the sender of the message), rather than the message/substance, that it is worth considering the value of water, may require particular skill on the part of the mentor. This is as negative past experiences and/or attitudes of distrust among specific youth may have to be recognised and confronted head-on, in order to break through. In the majority of cases, however, inspirational substance and a positive mindset in the group will suffice, as has been demonstrated in the workshops organised to date.
- Content enabling the children to establish a personal connection is generally important, although even more the younger the children. There is a very high probability of an enthusiastic response and full engagement by children who do connect with the subject that way. For the elderly, that way they let go of suspicion and concerns regarding the motive of the mentor – after which they focus, unreserved, on achieving results. Once active they will in almost all cases prove knowledgeable and creative. They effortlessly put their energies to the task and, in

many cases, produce sophisticated results, generally way beyond what would be expected of them in traditional schooling.

- There is a tendency, however, for the older children to keep holding back their motivation. Their suspicion may linger, impeding their achievements. In order to mitigate the difficulties, more preparation may be required. Additionally, to be motivated they may require better equipment and quality technical support. They may also require additional inspiration; such as physical evidence including certificates and credible references for a CV. One more psychological tool that can help is to gamify the process, turning it into some form of friendly competition where a winner will be compensated. The pedagogical requirements on the mentor(s) will typically be quite different than from the younger age groups.
- The comparison between a more uniform group (children 15-16), with one that displays a greater spectrum by way of age (10 – 16), was made possible by the way the workshops in South Africa were structured. On one hand, the uniform group demonstrated a greater ability to stay on task, required fewer re-explanations of instructions, and produced similar-styled presentations and posters to one another, creating a sense of homogeneity or non-diverse understanding of the importance of water and the key themes of this campaign. On the other hand, the more spread-out group showed that while older students might be *less* imaginative or *less* creative (i.e. more restricted by what qualifies as ‘practical’ and ‘realistic’), they produce a superior quality of presentations that demonstrate a more holistic understanding of the importance of the stewardship of water resources.

Culturally, adolescents in South Africa are seen to be more prepared to get involved in the decisions that affect their future as demonstrated by the strong presence of various political youth groups in the leading municipal provinces. These adolescents presented as if they believe that they can make a difference in their communities, and if given the opportunity, they would take the opportunity to share their ideas with the authorities that can help. The younger children, around 10 years old, are still very monitored or supervised by the elders in the community. They have shown that they aren’t usually expected to solve complex issues even if they directly impact their lives.

- Simple but effective “non-technical” tools combined with an element of surprise turned out highly efficient especially for the youngest and mid-aged groups, as illustrated by the “treasure” game and also the closure of the water supply when the children needed to clean their hands from the clay. Both those exercises, in their different ways (first more theoretical, or abstract, the second very concretely), acted as eye-openers, providing the children with a deep sense of understanding how essential water is. For the South African workshops, the live demonstration of water filtration and purification systems served as “non-technical” stimulus highlighting the importance of human ingenuity in the face of water crises around the world. Even for a school where the workshop was just planned, not yet held, improving their water supply served as a surprise educator about clean water.

Many other factors should be borne in mind as they too, may have a bearing on the outcome. This includes the physical setting. Most of the workshops started out in the ordinary classroom, while some of them featured workshops that brought the children outside, or to other facilities. In the case of the Omani workshop, the National Museum offered a fitting and resourceful environment. Other such factors include the size of the class, with the number of students varying between 16 and 26. The duration of the class matters as well. The experience of the 2<sup>nd</sup> round strongly indicates that two hours is not sufficient, as it does not allow enough time for the progression of insight through stages of gradually deepening reflections and increasingly creative response allowing the children to develop and further elaborate their own ideas. Three hours will allow more appropriate time in these respects. Extending from there, however, at this point we are still in the process of determining the most suitable duration under different circumstances. As far as the optimal number of students, the South African organisers assert that between 15 – 20 students, with a maximum of between 3 – 5 students per group is more efficient than 26 – 30 students, split into groups of 6 and above. This is because of the ability for all of the students to uphold constructive and on-topic communication, task & results orientation, and working under time constraints.

Another fundamental set of observations, less clearly formulated or anticipated from the outset, concerns the potential for positive engagement by, and impact on, other stakeholders, including teachers and principals. We have good reason to assume this extends to parents as well, although only due to anecdotal evidence thus far. Based on the limited observations at hand, however, it appears that the preparations undertaken before a workshop are of high importance for creating such potential. Teachers as well as the management of the school should be appropriately informed beforehand and also be allowed to be present and, to some degree, take active part in the workshop. At the same time, it is important that the teachers do not dominate the students. They should be present and go through a learning experience, similar to that of the students, meaning that they too should be subjected to surprises. They should stay in the background, however, and observe the lecturers and the mentors, as well experience what is shared, essentially through the eyes of the students.

Finally, while this has not systematically determined as of yet, we have strong reason to assume that the cultural context is important. In many countries, it is unusual for children to be given such space/mandate to take active part in a learning processes, engage in teamwork, interactive communication, be creative. In other cultures, this will be more commonplace. Such differences mean the children will bring varying experiences, be more or less prepared. Despite these expectations, however, from the workshops undertaken this far, we have not been able to conclude on any systematic difference in results due to differences in culture (age has had much more of an impact). Similarly, in regard to gender, we have not observed any systematic differences. Both boys and girls were very active and highly creative, in all workshops. We see no reason to “position” them differently.

In regard to these various factors, despite their apparent significance, none of them interfere with our basic tenet. The potential for engagement, learning and creation, relating to the value of water in different ways, stands out as strongly present for all children, irrespective of practicalities, age, culture, gender, and so forth, given the offering of a context that allows them to feel comfort, make a personal connection, and take initiative. Their responses then contribute to creating a virtuous circle of sharing experience and learning. This, we believe to be a cornerstone of active learning in all situations. One may then wonder, how come that it is then not more present in our lives, and in the lives of our children, than is actually the case? The answer to that question brings us back to the rationale behind the Youth workshop – water is the source of all life in the world, it is now under pressure, as are we, and water could and should serve as a unifying factor. Our children need not just be part of such a movement – they need to be at the centre of it.

## 6. The Continued Process

Following the first and second round of piloting and further developing of “Valuing Water”, the model has been successfully applied in South Africa and further implementation is under preparation in other countries. Water and Humanity is further considering how to integrate the scheme in a Green Climate Fund application, where a series of workshops will be implemented in synergy with a separate program, “Farm to School”, in support of improved awareness of nutrition and health, linking the supply and the demand of eco-friendly and healthy food and beverages.

Following the workshops in South Africa, held in September and November 2020, arrangements for the follow-up workshops in other African countries are under consideration, including how to establish an effective learning process for African countries.

In parallel, Water and Humanity continues contacts with other countries and territories, including India, Pakistan, Palestine, and also Iran and Italy, on the preparation of the four rounds of workshops.

In the following we outline the cornerstones for the next round undertakings.

### 6.1 Agreed Requirements

A set of requirements for “Valuing Water” workshops have been determined to date. They are summed up on the following, here divided into three aspects of the approach: i) the participating children; ii) the substantive subject, and; iii) practicalities:

i)

1. The undertaking should be based on the recognized good faith in the capacity of children and their creative potential.
  2. The workshops should be “children-centric”, interactive, and success be measured based on the engagement and creations achieved by the children.
  3. All children are to meet with the same respect and positive expectations for good results, irrespective of age, gender, culture, ethnicity, or other attributes.
  4. The workshop should take account of children’s own personal experience and ideas, while also using other innovative means and creating an experience for the children, in regard to the topic (realize different aspects of water’s value)
- ii)
5. The substantive focus is that of “valuing water”, recognising the universal importance of water, through history, locally, for all countries, at personal level as well as more broadly, extending to the world as a whole.
  6. The challenges of managing water should be recognised and possible solutions be considered. Space given for creative thinking about solutions.
- iii)
7. Pre-workshop preparations should be undertaken, including meeting with the teachers beforehand and the opportunity for them to discuss and become familiar with the subject as well we the objectives.
  8. The responsible person/mentor, should be approved by “Water and Humanity” (screening process, trained, certified).
  9. Execution to be undertaken with the responsible mentor present (assisting mentors).
  10. Characteristics such as age group of children etc., left open. However, not more than 30 participating children per session.
  11. Materials developed are to be collected and documented. Suitable display and dissemination to follow. Ownership rights flexible but principles agreed before the workshop, and with some material by the school and some to be shared in the Water and Humanity network.
  12. Follow-up obligatory, with children in the position to recapitulate lessons.
  13. Evaluation and reporting to Water and Humanity is obligatory, with lessons learned channelled to Water and Humanity.
  14. Opportunities for outlets and impact of ideas presented to be looked for by the participating parties.

## **6.2 Protocol and considerations in next-stage implementation**

As an outcome of sessions to be undertaken, arrangement are made for them to draw effectively on the experience of the previous process, based on a “protocol” / guidelines framing the set-up and the conditions for certification:

- Certification of mentors by Water and Humanity
- Pre-workshop action list
- Support material from Water and Humanity
- Quality assurance
- Execution
- Post-workshop guidelines
- Documentation and dissemination
- Impact mechanisms
- Certificates of recognition

Reflecting what has proven to work well under different circumstances, the protocol invites flexibility and add-on components as a basis for continued learning how to adapt to specific circumstances. At the same time, it frames the conditions required for “certification” based on sound principles and proven results.

Building continued insight how to manage variation in conditions, and adding to the experiences thus far, workshops planned for the next phase are requested to bear in mind the role of:

15. Culture
16. Social background
17. Gender factor
18. Impact of surprise factor
19. Time planning at the event, including ensuring an appropriate duration of the session
20. Role of equipment and technical support
21. How the preparations and organisation can best ensure the buy-in of teachers and school administration
22. Productive follow-up

Workshops will follow the same format as previous rounds, with a typical 90-minute allocation that requires students to participate in informational interviewing and some tailored activities as dependent on the space we are provided. In the post-COVID regulatory environment, some restrictions on capacity and movement (outside of the classroom for example) may apply.

### **6.3 New formats for application**

Going Forward, new rounds of Valuing water will be carried out in several of the countries and cities where it has already been tested, following expression of interest and demand for follow-up from both authorities, schools, teachers, and students (Bologna, Kerman and Muscat representing three examples). Additionally, the model will be tested in more countries, across different continents. The existing format, as set out in the present report,

sets the directions, while also offering guidance for how the set-up can be adjusted to match with new local challenges, and kinds of context. In Europe, Monte Negro has taken inspiration to plan for a larger scheme for testing and implementation in large parts of the school system. In south Asia, Pakistani authorities and stakeholders are looking at testing the model which incorporates differentiation between private/public as well as urban/rural conditions Africa, preparations are already under way for Lusaka and Nairobi, coupled with plans for a collaborative Pan-African framework featuring advancement of well-performing student groups to a common regional platform.

The lessons generated by Valuing water will flow also into other experimental modes of education. A particular model set-up under development is that of “Farm to school to home”, creating linkages to boost awareness of food and water issues and their importance for health and sustainability. There is also a link to plans for establishing “passport earth”, an instrument for young individuals as well as groups to attain the skills and tools to measure and act upon their own carbon and water footprints.