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Since November 2016, science centers and museums around the world have been celebrating science and innovation under different themes in parallel with the UN's World Science Day for Peace and Development. This celebration is aimed at encouraging individuals towards taking part in sustainable development in their communities, and to engage everyone in science and technology learning.

NAMES network took an active part in celebrating the International Science Center & Science Museum Day (ISCSMD) this year with the participation of 8 of its members in organizing different activities and scientific events under the theme "Science as a Human Right". NAMES members were also featured on the official website of the ISCSMD, and marked on its worldwide map.



Map of countries participating in the ISCSMD 2018

During their participation, NAMES members partnered with different organizations in order to support the implementation of the activities contributing to the theme "Science as a Human Right". Each member designed and implemented a variety of activities that are suitable for their audience's needs and existing culture in their community.

#### 1- The Children's Museum Jordan

This year, the team of the Children's Museum Jordan surprised the children at a shopping mall to bring their attention to the fact that science exists everywhere, and to reach a new audience and families. After the activities in the shopping mall, the Museum offered free entrance to the Science Film Festival, to encourage families to engage with science and interactive learning exploration methods.

Shopping Mall activities included 38 families and 92 children, aged 4-12 years old; the conducted activities were:

• Windbag (Bernoulli bag)

Children discovered that the differences in air pressure levels can lift an airplane, fill a bag, or even raise a table.

• Bed of Nails

Children learnt about the spreading of air pressure by placing a balloon on a bed of nails and observing how the pressure points are spread all across the surface of the balloon.

• Pop Your Top (Film Canister Explosions)

Children learnt how to fuel a film canister rocket with the famous bubbling tablets.

Balloon Expansion

Children learnt the concept of air and understood that empty bottles are not really empty.

• The Disappearance of Water

Children used absorbing crystals to make the water disappear.





Part of the activities conducted at a shopping mall by the Children's Museum Jordan

The activities expanded to hosting children and their families in the Children's Museum to watch international scientific films within "The 2018 Scientific Film Festival", followed by an interactive activity related to the film's theme:

• *House of Little Scientists*, followed by the "Biting Plants" activity:

Children aged 5-8 years old watched a film about carnivorous plants, followed by an activity about the nature of these plant and how they feed on animals.

• *Math Explosion Episode 5*, followed by the "How Tall is a Tree?" activity:

Children aged 9-12 years old watched a film about different lengths, and then learned how to measure the length of a long object without using a ladder.

• Messi Goea to Okido, followed by the "Okido in Bloom" activity:

Children aged 5-8 years old learnt about the nature of rain and the reasons behind such an occurrence.

• *The Show with the Mouse*, followed by the "Dry Freezing" activity:

Children aged 9-12 years old familiarized with ways of preserving food.

## 2-Al Nayzak Organization for Supportive Education and Scientific Innovation – Palestine

This year, Al Nayzak held interactive activities around the concepts of design thinking and 3D Printing, addressing science as a human right. The activities targeted 120 university and school students in aged 12-14 years old from both genders.





The activities included:

- **Design Thinking**: a workshop that introduced the concept of design thinking by having the participating students solve a problem using the required steps; identification of the problem, empathize, ideate, design and evaluation of the solution.
- **3D Pens**: students learnt about 3D objects and designs, and drew their own products.
- Tinkercad: students learnt about 3D printer's software, and used tinkercad to design their 3D objects then print them.



Activities at the Science and Technology House

# 3- Bibliotheca Alexandrina Planetarium Science Center – Egypt

The Bibliotheca Alexandrina Planetarium Science Center celebrated the ISCMD for the 3<sup>rd</sup> time this year, targeting 100 school students, 5<sup>th</sup> and 6<sup>th</sup> grades; these activities included:

- The "Ocean in a Jar" workshop, which covered the 14<sup>th</sup> SDG-to conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
- The "Science on the Go" stands (drop in activities), which covered the 2<sup>nd</sup> and 3<sup>rd</sup> SDGs–end hunger, achieve food security and improved nutrition, promote sustainable agriculture, and to ensure healthy lives and promote well-being for all at all ages.
- The "Ultralight Show, Marine Life Edition", covering the 14<sup>th</sup> SDG.

The Bibliotheca Alexandrina Planetarium Science Center also addressed this year's theme by an event that began with a short lecture about the SDGs, presented by one of their volunteering scientists to 100 elementary school students, followed by open discussions on healthy habits, ways of conserving our water resources and organisms, and finally, ways of reducing our food wastes.



Part of the activities implemented by the BA Planetarium Science Center

## 4- Sonbola Group – Lebanon

This year, Sonbola focused on highlighting some of their ongoing science education activities at the organization's Learning Center in Anjar, Bekaa, Lebanon. Sonbola also promoted this year's theme through their day-to-day activities, working with young students and Syrian youth.

The activities included:

- Science Lab: Syrian refugee children, 7-14 years old, and youth, 15-24 years old, learnt about harnessing solar power and the benefits of renewable energy. The lesson was applied in a practical experiment where students created the prototype of a solar powered crane and a solar powered water mill using our STEM for Refugees tool kit. Older students attempted to understand the components of a solar panel and identified a few easily available materials that could be used to recreate the same. This activity benefited a total of 51 participants, and contributed to the 4<sup>th</sup> SDG.
- Urban Agriculture Initiative: Over the summer camp, and in partnership with the Food Heritage Foundation at The American University in Beirut (AUB), Sonbola implemented an Urban Agriculture activity that focused on providing children and youth with health and nutrition education, as well as sustainable farming practices. Through this activity, students planted a fruit and vegetable garden in the backyard of our Learning Center; on the International Science Day, young participants harvested the first produce from this garden. Children also learnt about healthy food and nutrition practices in an interactive session following the harvest; this activity targeted 37 participants aged 7-24 years old, and contributed to the 3<sup>rd</sup>, 4<sup>th</sup>, and 12<sup>th</sup> SDGs.



Part of Sonbola's activities

# 5- The Scientific Center of Kuwait

For this year, the Scientific Center focused on agriculture and ending hunger through a workshop that targeted every purchaser of tickets to the Discovery Place in the center. The workshop hosted two local Instagram micro-influencers, biohydrokw and thecraftymom, and 50 children and adults distributed over two sessions. The workshop focused on sustainable agriculture and on teaching participants how to replant kitchen waste in their home gardens. It included real examples of kitchen waste with guidance from both micro-influencers, who gave hands-on instructions on how to plant, timelines, expected results, etc. This workshop contributed to the SDGs by promoting the end of world hunger, as it was highlighted as a solution to educate families on food waste.



The workshop held at the Scientific Center of Kuwait