



# RHAW School Twinning Program Outline

January 2020

## Background

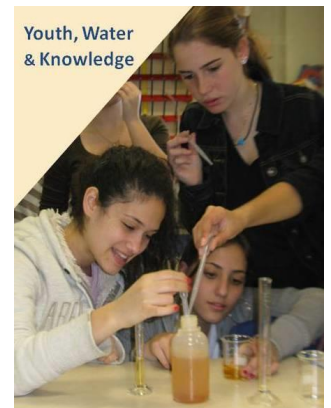
The **Rotary Hands Across Waters** (RHAW) innovative STEAM education program (combining Science, Technology, Engineering, Art and Math) use the global Water & Sanitation challenge and advanced new solutions as base for collaborative cross-cultural science education. Developed by **Hi-Teach**, it is run in association with the **Rotary**, led by **District 2490 Water & Sanitation committee** and hosted by **the Haifa Rotary Club** and many partnering RC's, Industries, Government, Academia and NGO's.

## Program Goals

1. Educate youth on local and global **Water & Sanitation challenges and innovative solutions**.
2. Promote global **cross-cultural collaboration** on the common water challenge.
3. Use ancient, current and future **water solutions as a new education content base**.
4. **Empower science teachers** with practical modern STEAM tools.
5. Develop **awareness, involvement, leadership and teamwork**.
6. Inspire interest in study and practice of sustainable **clean-tech**.
7. Provide **corporate stewardship** and **community involvement** opportunity.

## Program Outline

The program taught by local school faculty, with Hi-Teach guidance and e-learning content. It enables sciences studies (Physics, Biology, Chemistry) using water systems as vivid relevant examples. The **STEAM** multi-disciplinary program teaches Science, Technology, Engineering, Art and Math through use of specific local water subjects as research topics. The scheme promotes interest, engagement, and innovation and an opportunity to collaborate globally and meet. It builds upon the established collaborative success with 15,000 students and 70 schools from diverse communities in Israel, working together for over 10 years on innovative solutions to water challenges.



## Content

The **Hi-Teach** website will provide English content for a 2019-20 twinning pilot, including:

1. Sustainable preservation of water resources.
2. Water usage: Agricultural, Privet and Industrial.
3. Water supply systems and prevention of water loss.
4. Sewage treatment, pollution and reclamation.
5. Water quality, tariffs, policy, regulation and security

Subjects and program outline will be tailored for each of the collaborative twinning schools.

Sharing their finding will promote awareness and call for action which is the program goal. The program will encourage twinning of supporting Rotary clubs and youth exchange.





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## Teaming with local water companies

Educational visits to water work, supply systems, desalination or wastewater treatment plants, can serve as reverse engineering playgrounds where the science, technology, engineering and economy behind the elaborate systems can be demonstrated. Similarly, ancient aqueducts, and old well pumps can tell the story of past wisdom and hint to where the development may eventually lead. The program turns these local water facilities into valuable educational resources.

Teachers and students are guided in the study of the local water systems gaining science understanding and an educated foresight of future challenges. They will be asked to propose solutions to these challenges, considering the practical aspects of technology and economy. The classes will then be guided to collaborate with participating schools in Israel and around the world, comparing their observations shared in a digital media formats via the internet. Projects will then be presented in science fairs conducted in the school and in association with academia, industry and government in technology exhibitions and conferences like the biannual **Watec** show.

## Partners

Dr. Amnon Shefi, Hi-Teach founder, initiated the program partnering with the Water Authority and local Industry (**Bermad, TahaL, NaanDanJain Mekorot**, and many more) that provided knowledge, equipment, site visits and financial support. Four government ministries later joined the program including the ministry of Education. Global partnership was spearheaded by the **Rotary** together with **GLOBE** (NASA), the **Stockholm Water Prize** and **WRAP**. The **Technion** Grand Water Research Institute (GWRI), led the broad academic alliance providing guidance and scientific support.

## Twinning of schools and Rotary Clubs

The international nature of the Rotary makes the Twinning Program suitable for club collaboration. With Water & Sanitation placed high on the Rotary areas of focus list, and the program TRF **Noteworthy Recognition** the RHAW Twinning program is an ideal subject for club's cooperation. Any two clubs can cooperate, by joining the program and having a schools collaborate with a school that runs the program in israel.

## Expected contribution

A contribution of \$2,100 is expected from each RC that brings a school to the program, It will grant two Paul Harris fellowship recognitions

Click the above picture for [a program video](#) and [The Israeli way: Water Education](#) for a Podcast.