

Water Fun – hands, minds and hearts on Water for Life!

Key findings

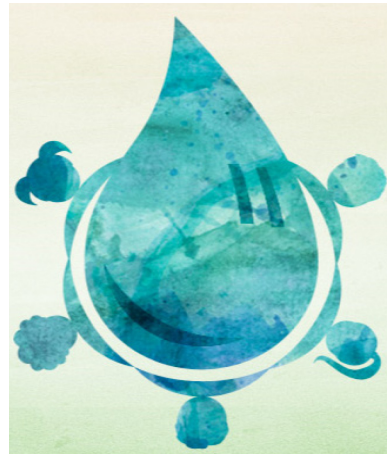
Early environmental education towards long-term and sustainable development

- Teacher handbook „Water Fun“ in Arabic and English
- Illustrated student handbook „Water Fun“
- Six consecutive lesson concepts incl. four class room experiments for the primary school level
- Project week concept on water quality, wastewater treatment and reuse (bench top & experiments) for less than 5 € per school
- Overall achievement: 118 primary school teachers in Jordan and Palestine teaching around 5000 students in 5th and 6th grade

Together with the BDZ, the UFZ has implemented the teaching program “WATER FUN - hands, minds and hearts on Water for Life!”.

Under the motto „Water For Life!“ Water Fun builds for the future of the water sector and addresses the topics water protection and wastewater treatment targeting primary school education.

The program uses an integrated didactics concept for water in nature and in human livelihood. It provides teachers with background information and detailed explanations to guide students through the various teaching units.



The topics of the teaching program are conveyed by means of experiments and activities for primary students in a manner that fosters enjoyment and interest in thinking about natural and engineering phenomena, through experimenting, open discussion, and

discovering and understanding physical processes related to water resources.

The program concept is reflected in the program title:

Water Fun... - Students should have fun during the teaching units and should also have the opportunity to use their creativity, satisfy their curiosity, and exercise and deepen critical thinking.



After all, children like to have fun and they will also protect things that they like. This way they develop the awareness, interest, strength, and courage to take responsibility for water protection in Jordan and Palestine.



„hands, minds and hearts on...” - This progressive education triad fosters the students' active and critical involvement with their teaching topic and its elements in a balanced, yet comprehensive manner. Methods specifically designed to structure the learning processes in order to impart knowledge, raise awareness and support new attitudes and behaviors in line with sustainable development.

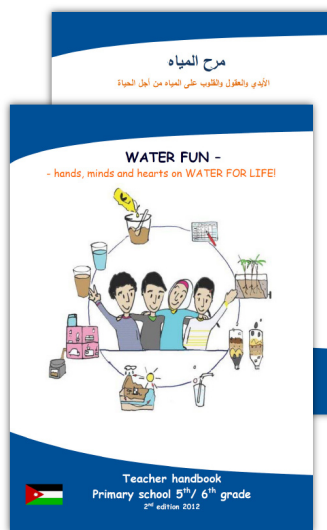


Water for life! - This title is borrowed from the United Nations International Decade for Action “Water for Life” (2005 – 2015).



The goal of the UN Water Decade is to encourage action for the fulfillment of the Sustainable Development Goals related to water resources. Jordan and Palestine are committed to achieving these goals and the title represents these countries' focus on sustainable water management.

The teaching program delivers the associated message in a manner tailored for primary school students while its pedagogical concept takes the conditions in Jordan and Palestine into account with regard to water as a scarce resource.



The teaching program is designed to stimulate and improve reflection capacity as regards to water consumption, wastewater production and components, wastewater treatment and the potential reuse of treated wastewater.



Special classroom activities and experiments help students and teachers to train their “engineering” skills and understand and accept (treated) wastewater as a very valuable resource for irrigation in Jordan and Palestine.



References and further Reading

- (<http://www.waterfunforlife.de/>) Water Fun – hands, minds and hearts on Water for Life!
- Goedert R. et al. (2012) Capacity Development in IWRM: experiences and lessons learned. World Water Week 2012: Water and Food Security. 27.-31. August 2012, Stockholm, Sweden
- Goedert R., Cardona J., van Afferden M., Abassi B., Samhan S., Ali W., Daoud R., Tamimi A. R., Uleimat A. A., Müller R. A. (2012) Water Fun – hands, minds and hearts on Water for Life! Teacher handbook Primary School 5th/ 6th grade. Leipzig, Germany