

Thirst for Knowledge: Think H₂O!

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Water is at the core of sustainable development and touches every aspect of our lives from drinking to food production; it is essential for energy, healthy ecosystems and for human survival. However, freshwater is under threat from climate change, hydropower, industrial allocation, land use changes, and pollution. Despite growing awareness, there is still a great need for a multi-layered approach coupled with extensive educational efforts. Education plays a key role in shaping how individuals and communities understand the importance of water, its availability, management, consumption and what challenges our future water resource faces. These education efforts need to spread more widely in society, as the world sees a greater need for skilled professionals in water management.

Sydvatten AB provides drinking water to one million inhabitants in Skåne, Sweden. At the same time the company is committed to promoting the value of water and encouraging quality education. From this context, the educational event Think H₂O! started in 2014 as a collaboration between Sydvatten and Lund University, with a dual purpose of increasing young people's awareness of the value of water and encouraging them to careers in the water industry (Brogaard et al. 2016). "Think H₂O!" is designed as an annual scholarship program offered by Sydvatten with an attempt to ignite young minds on the significance of safe and reliable water supply to society. Our mission is to raise awareness, inspire and secure future sustainable water users.

Think H₂O! offers a unique opportunity for high school teachers and their students to explore and learn about water from a multifaceted perspective at Lake Bolmen, southwest Sweden's primary source of drinking water. Based on place-based learning, this two-day adventure weaves theory, practice, and situational experiences into a solid foundation of lasting knowledge. Through workshops, lectures, role plays, experiments, and outdoor activities all with a focus on the hydrological cycle, students learn about water consumption, water access and demand, water ecosystem and drinking water production and more. Participating schools are encouraged to integrate this interdisciplinary knowledge both before and after the course.

In recent years, "Think H₂O!" has experienced a steady increase in the number of school applicants. This growing interest underscores the relevance and importance of water-related education among high school students. Furthermore, the program's impact on students' future career choices has been evaluated as part of a doctoral project, initiated in collaboration with Sweden Water Research and Lund University's Department of Psychology. The project examined if and how students are influenced in their career decisions after completing the "Think H₂O!" course. The results highlight the program's long-term impact and demonstrate its role in shaping the future of participants as they consider water-related careers and other related fields. Participants' confidence in their ability to succeed in an engineering education increased. Their feeling that they would fit in socially, and the perception that their career goals would be fulfilled by working as an engineer was also strengthened. However, the longevity of effects were short-termed, and more persistent for men than for women (Björklund et al, 2023).

References

- Björklund, F., Giese, L. & Thellhed, U., 2023: Pedagogisk verksamhet – ett verktyg för framtida kompetensförsörjning? (Educational activities – a tool for future competence supply?) Svenskt Vatten Utveckling, Rapport 2023-09
- Brogaard, S., Åkerman, A. and Wickström, A.K., 2015. Think H₂O! – An educational partnership to raise students' awareness of the water challenges. In World Environmental Education Congress.