

FOSTERING GLOBAL PARTNERSHIPS BY EDUCATION AND PROFESSIONAL DEVELOPMENT

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The mission statement of IAHR's Education and Professional Development (EPD) Committee targets regional and world-wide activities promoting education and professional development. Regional activities in that field are linked to world-wide activities. This overall mission of the EPD Committee contributes therefore to Sustainable Development Goal (SDG) 17, Global Partnerships, which calls for "cooperation on and enhance knowledge sharing (...) through a global technology facilitation mechanism" (United Nations, 2015). Moreover, SDG 17 calls for "implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals". Thus, SDG 17 can be viewed as auxiliary goal, which provides mechanisms to support the implementation of the SDGs in general. Besides contributing to the development of new mechanisms to achieving this goal, the EPD Committee particularly focuses on further developing a number of already existing activities within IAHR, including the IAHR Media Library, the Young Professionals Networks of IAHR, and the HydroWeb international online course.

Knowledge sharing through the IAHR Media Library

The IAHR Media Library (www.iahrmedialibrary.net) provides a web resource for the storage and dissemination of photographic, animated and video material relating to hydraulics, hydrology and water resources (including photos and films with brief technical descriptions). Moreover, teaching tools in hydraulics are provided, such as slides of class lectures and seminars, didactic computational software or e-learning tools. The Media Library thus provides a general mechanism for knowledge sharing as defined in SDG 17, giving easy access to teaching material particularly also to teachers and students in the Global South. This way the EPD Committee contributes to SDG 4, which among its targets has the goal of ensuring equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.

Networks for IAHR's Young Professionals

A typical challenge for students is to get into contact with their future profession in practice in a relatively early stage of their education, in order to learn from experienced engineers and create a network for their future careers. By establishing the Young Professionals Networks (YPN), which have evolved in the past few years from the original IAHR student chapters, IAHR has created a common platform to tackle this challenge in the hydraulic engineering and research community. YPNs carry out different water-related activities, projects and educational programmes; they also conduct special activities in the scope of the biennial world congress. The fact that the community of YPNs is ever growing, with several new YPNs being established around the globe every year, shows that the strategy is successful and young professionals can draw an added value from their networks, just as aimed for by the SDGs.

Online collaboration with HydroWeb

HydroWeb was first established as an educational initiative in 1999. After running successfully for many years within the scope of the EuroAqua joint Master programme on European level, in 2014 it was extended to become available to IAHR's YPNs. It deals with web-based collaborative engineering in hydrosciences. The idea of HydroWeb is that participants from different universities are forming teams to run online a river modelling project via the internet within a time window on a shared

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web-based project platform. Key focus in this initiative is not so much the learning of technical skills but rather the development of a "technical culture" for online team work using web technology and information sharing principles in engineering projects (Tritthart and Molkenhain, 2015). To date, young professionals from Austria, Brazil, China, Germany, Spain and the US have taken the opportunity to participate in the HydroWeb experience under the umbrella of IAHR, and their reports overwhelmingly indicate that they have learned collaboration skills far beyond what is available to them at their respective universities.

Conclusions

These three examples of activities coordinated by the EPD Committee show how the sharing of knowledge, the creation of networks and "hands-on" learning by online collaboration assist in reaching the UN's SDGs. The committee aims to implement new activities and further develop the existing ones in the years to come. ■

References

Tritthart M, Molkenhain F. (2015): Hydroweb experience 2014. *HydroLink*, 1/2015, 28; ISSN 1388-3445
United Nations (2015). Transforming our world: the 2030 Agenda for Sustainable Development. United Nations - Sustainable Development knowledge platform.