Africa has a vision where there is an equitable and sustainable use and management of water resources for poverty alleviation, socio-economic development, regional cooperation and the environment by 2025. Natural climatic variability and the impact of climate change have the potential to compromise this vision and contribute to already alarming water resources situation in southern Africa and Africa as a whole. However, a major constraint is both inadequate human and institutional capacity for managing the continents water resources, highlighting an absolutely critical need to train, develop and nurture a critical mass of highly motivated and highly skilled water professionals. Hydrological sciences sits at the heart of this, but how are hydrologists best trained in this dynamic environment?

In this paper, some perspectives from hydrological science education initiatives are provided. Key points include:

- The need for transdisciplinarity in hydrology education balanced with a need to retain disciplinary strength.
- The need for educational models that consider training from school through undergraduate and postgraduate and beyond.
- The need to provide opportunities to train those with different backgrounds in hydrological sciences.
- The ways in which research programmes play a role in human capacity development in regions with scarce skills.
- The benefits and pitfalls of themed networks focused on water resources education and the complications of donor led initiatives.