Journal of Humanitarian Engineering

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Journal of Humanitarian Engineering (JHE)

The Journal of Humanitarian Engineering (JHE) is an open access publication that publishes outcomes of research and field experiences at the intersection of technology and community development. The field of "humanitarian engineering" describes the application of engineering and technology for the benefit of disadvantaged communities. The field spans thematic areas from water to energy to infrastructure; and applications from disability access to poverty alleviation. The JHE aims to highlight the importance of humanitarian engineering projects and to inspire engineering solutions to solve the world's most pertinent challenges.

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EWB respectfully acknowledges the Traditional Owners of the Country on which we work. To learn more about our commitment to reconciliation, read EWB's Reconciliation Action Plan.

Cover photos: Various photos of the design and commissioning of a solar powered membrane based water purification system in Ryan Epps Home for Children (REHC) in Michaud, Haiti. Photos provided by Shaveen Pinto and reproduced with his permission.



JOURNAL OF HUMANITARIAN ENGINEERING

English literature was not a waste of my time!



I was good at maths and science at school. I did ok in English Literature, but I hated it with a passion. Why would I need to be able to analyse and communicate if I was going to spend my professional life as an engineer solving equations and running experiments?

Oh how naïve our teenaged selves can be! Fast forward to now and I would hazard a guess most of my engineering colleagues spend a significant proportion of time thinking about how our actions as engineers fit into this complex system called "life". This is far from what I was taught in most of my undergraduate units in chemistry, maths and physics. But emerging university courses incorporating service learning and humanitarian engineering are teaching students about the extent of their sphere of influence as engineers, and how their actions impact upon others. This is a key skill for students to develop, regardless of whether or not they enter into more traditional or "humanitarian" engineering fields. Compassion, and the ability to communicate with both colleagues and wider society, will improve every engineer's abilities to conduct their jobs in an effective and meaningful way.

This issue presents two papers discussing how students with aspirations to "help" can be engaged in service learning programs, and how the knowledge they gain might be able to positively impact society. The other two papers take the technical knowledge so revered by engineers and apply it to issues of water treatment in the development context.

I encourage students to read this issue as it highlights various aspects of engineering which are crucial for anyone interested in the societal impact of our work: a good technical background fused with a sound understanding of the social and cultural implications of our work.

Dani Barrington

Editor-in-Chief, Journal of Humanitarian Engineering

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