

# Engineers in the social sector

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Jobs are evolving in step with a world that is continuously evolving. For many in today's generation, it is no longer about finding a stable job that pays well and one that they will continue doing for the next 20 years. For them, it is much more about finding meaning in their work and wanting to see the difference their work can make to an organisation, the larger world and hence, themselves.

Engineers have traditionally been drawn to either the manufacturing setups, or in the more recent past, Information Technology (IT) organisations. At the IT firms, many of the engineers are required to code, test or support software

applications. This does not leverage their engineering specialisation and many engineers get disillusioned soon.

They feel stuck in their jobs and don't find value in their work. The four rigorous years spent studying disciplines like mechanical engineering seem like a waste. There are of course a lucky few who do get to be functional analysts or domain specialists, but their number remains less.

Then, of course, there is the question of interest. Many engineers enjoy teaching not only at graduate and postgraduate levels, but even at elementary schools. I often see engaged engineers deriving a lot of happiness in explaining the workings of a car engine to a student of Class 6 or 8. Engineers typically enjoy analysis,

systems thinking and order, and strive to make the complex sounding ideas of science and maths interesting to the general populace, children included.

## Applying well

These engineers can make excellent teachers. This is also probably one of the reasons why the last few years have seen a spike in fellowships and programmes that offer experienced engineers a chance at teaching. These are opportunities where many find more fulfilment than their regular corporate jobs.

Over the past six years, we have seen many engineers transform into excellent teachers and teacher educators - their ability to connect with the classroom has

been nothing short of extraordinary. The discipline of engineering is built on the fundamentals of maths and science, the very basic subjects of school education. Good engineers never lose touch with these basics. The 'application' layer of engineering built on the strong 'theoretical underpinnings' of science make engineers a very formidable force in teaching at schools.

A civil engineer will not teach the Pythagoras theorem as a mere formula; she will relate it to its use in measuring elevation for instance and help students understand the theorem and its application. Similarly while teaching Physics, an electrical engineer will easily relate the concept of electromagnetism to gener-

ators and motors. Again a concept that children can relate to easily. This is one of the main reasons why we see engineers turn into engaged teachers in a classroom.

After all, what is the point of studying a concept in science or maths if it remains a mere chapter in a book with no relation to real life?

While running behind 'engineering' or 'technology' jobs, many fresh engineers fail to look at the world around. They fail to look at other career choices that are beyond the traditional. The development sector has many possibilities where an engineer can learn, contribute and make a meaningful impact on the world around.

The development sector currently offers many opportunities to understand the

public education system and help improve it ground up. Fresh engineers can engage with government school teachers in rural India, engaging in a dialogue with them, learning from them and sharing knowledge. For fresh engineers, these are not just job opportunities, but a chance to learn, grow and contribute to the world of tomorrow.

Engineering has always been equated with nation building. In an era when we all seek a better world to live in, what better way than to contribute to the building of that better world, a world that provides an equal opportunity to everyone.

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