



Brick Laying in Brogues

How Project Managers can increase their on-site construction knowledge to better manage skilled labour shortages

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Imagine managing a scuba diving lesson, having never been scuba diving.

After finishing my undergraduate study in July 2014, I worked for 12 months as a Property Graduate with a large UK hospitality chain. By the time I completed the scheme and began working for the Project Management Consultancy I am still at today, and I started my Project Management Masters course in September 2015, I had worn a hard hat and site boots only three times - yet I took pride in claiming I was a member of the Construction Industry. How could this be, if I knew next to nothing about actual time or processes on a construction site - the foundation place of the Construction Industry?

Here lies a national oversight in my eyes, regarding Project Management education, training and development.

Project Management is vital for the leading of construction projects, to make sure that (to name just a select few activities):

- Construction designs and architectural details are managed to produce efficient construction concepts
- Contractor and contract type selections and tender processes run efficiently
- Planning processes and conditions are dis-charged as required to allow construction works to occur
- Programmes, Gantt charts and sequencing exercises are adhered to
- Budgets are controlled and managed
- Action trackers and risk registers are followed effectively
- A smooth transitional process ensues during the Practical Completion and Handover periods

There's book smart. There's street smart. Should there be 'tools' smart?

But how can anyone be an efficient Project Manager in such activities as the driving force behind meeting targets and demands in the Construction Industry, if they are not taught from an early point about the actual construction and trade practices on construction sites, at the core of what they oversee? Would you have someone capable of management and the related methods leading a scuba diving session if they had never been taught how to scuba dive and had never actually done it?

As construction demands sit excessively high across the UK at present, especially regarding new homes developments ('1 million new homes by 2020'*) the role of the Project Manager is becoming increasingly invaluable to the delivering of successful construction projects.

This will be done best moving forward if any knowledge and skills gaps of Project Managers can be addressed early in Project Management education and training - in my view, Project Managers need to actually understand the construction processes on sites themselves via a hands on approach, not just be able to programme and manage around them.

Additionally, any activities on site during a construction project struggling as a result of skilled labour shortages, could be better managed and controlled by more skilled Project Management. A fresh outlook on how to deal with skilled labour shortages, could be in looking at the skills shortages of other key parties within construction projects, such as those of the Project Manager. It is very rare and it comes via means other than current university education, that a Project Manager is exposed with good understanding to the specific elements of on site construction trades. What if, by an understanding of the trades practices themselves, a Project Manager could then better manage and organise construction works with skilled labour shortages, by knowing what the actual trades practices entail themselves?

If such changes could occur, one day you might even catch the 'suit' that is the Project Manager getting his hands dirty on a site, or at the least - fully knowing how to.

‘Give me a day on MS Project, I’ll plan a thorough programme. Give me a chisel, I’ll be a danger to myself...’

The most suitable times for Project Managers to give attention to the knowledge gap they have when it comes to actual construction trades, is best done in my view during university studies. My Masters study at present is enhancing my knowledge and skill sets as a Project Manager in module guided areas, but it is not giving me any better understanding of the trades I am overseeing as I Project Manage constructions. If I were to come across a skilled labour shortage on a live construction project I oversee, I would not know how to deal with the issue specifically - I would only know how to work on the impacts created generally in my master programme, risk registers and monitoring processes. It’s worth noting that post university study, the actual on site construction processes and trades activities are not currently covered in the RICS APC training process for Project Management, a process I am now beginning. By way of example, it is possible therefore to be a Project Manager without having ever learnt the name of certain trades materials and tools on a site, never mind having ever picked them up and learnt how they are used in a process.

My proposal to combat this, is as follows:

All undergraduate students studying on a RICS accredited Project Management course should undertake Trades Weeks.

A Trades Week, is one where students spend a week of work experience working with a specialist construction trade. Trades weeks should occur once a semester, equating to two per academic year, six in total across an undergraduate course of 3 years. For postgraduate students on a RICS accredited Project Management Masters course, full time students should undertake two trades weeks per semester, equating to four for the length of a postgraduate course of 1 year. Part-Time/Distance Learning postgraduate students should undertake one trades week each semester, equating to two per academic year, four in total across a part-time course of 2 years.

Both undergraduate and postgraduate students should undertake trades weeks as compulsory. Undergraduate students, to understand the basics of trades from the ground up of construction projects, should undertake four set trades weeks as follows, and two trades weeks in areas of their choice to complete the requirement of six there after:

'It would make a change to see a *suit* who knew how to set up a scaffold.'

Compulsory Trades Weeks

- Foundations and Piling Contractor Work Experience
- Super Structure Frame Contractor Work Experience
- Fit Out and Internal Finishes Contractor Work Experience
- Envelope and External Finishes Contractor Work Experience

Multiple Choice Trades Weeks

- FF&E Install Contractor Work Experience
- Mechanical Contractor Work Experience
- Electrical Contractor Work Experience
- Groundworkers Contractor Work Experience
- Joinery and Carpentry Contractor Work Experience
- Decorating and Finishing Contractor Work Experience
- Floor and Carpet Fitting Contractor Work Experience
- Maintenance and Repairs Contractor Work Experience

Postgraduate students should undertake the four set trades weeks if they are new to a RICS accredited Project Management Masters course, both full time and part-time/distance learning students. If they studied a RICS accredited course at undergraduate level previously however, and would have therefore completed the four set trades weeks, then they should choose the four they do from the areas of their multiple choice from the selections available. Postgraduate students of both full time and part-time/distance learning courses should also be encouraged to propose trades weeks they source and identify themselves if possible, if they can demonstrate set criteria can be followed for their proposed trades weeks.

Such criteria for a trades week to prove a worthwhile exercise. is as follows:

‘The image one should have in mind when they hear *Project Manager*, is someone suited but in a hard hat’.

- Allowing students to be inducted into the basic approaches of the construction/trade process
- Providing students the opportunity to shadow such activities taking place in a live construction environment
- Providing students the opportunity to take a ‘hands on’ approach to an actual associated task
- Setting students project management tasks to plan an entire associated process as part of the construction/trade
- Setting students to plan how to project manage, mitigate and work around possible issues for a construction/trade process including the possible impacts of labour skills shortages

Demands of the construction industry, especially those for new homes developments can be met by effective Project Management. The next waves of young Project Managers need to be best trained as possible to prepare them for the vital role they will play in the future.

This can be best done by making sure they are introduced to actual on site construction processes and trades as well as the over-seeing processes most associated with the programming and planning roles of the Project Manager.

Skilled labour shortages can be best mitigated around by effective Project Management if Project Managers understand the trades themselves via spending time during university studies on work experience trades weeks. The principle processes from the ground up of construction works can be covered as compulsory trades weeks. Further areas can then be selected as favoured by students.

It could well now be a great time to move Project Management away from ‘suits in front of the laptop’, to a combination of management and trades processes knowledge skills. Perhaps we may one time see a Project Manager on a site so aware of trades practices that they forget they are the ‘suit’ and take on bricklaving in their brogues.



Arran is a Project Manager for TowerEight in London. He is currently managing three hotel developments - one in London, two in Edinburgh. Prior to joining TowerEight he was a Property Graduate for Whitbread where he was based in the Network Planning Team expanding the current Whitbread estate across the UK. He read Design and Management at the University of Leeds at undergraduate level and is currently reading Project Management with Oxford Brookes University as a part-time Masters student. He hopes to complete his RICS APC by 2018.

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