

Ok who's next? Our role in developing and mentoring the next generation of Public Works Engineers

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ABSTRACT: *As we focus our minds on sustainability and effectively managing and developing our public assets for future generations, it is important that we don't forget perhaps our most important assets, our staff. We all have a role to play in succession planning by mentoring and encouraging the professional development of the next generation of Public Works professionals; those that will take over responsibility for managing public assets as we retire from the workforce and to whom we will "pass on the baton".*

In this paper we will discuss some of the challenges involved in mentoring younger staff, in recognising their different needs and ways of doing things and in helping to prepare them for the challenges ahead. We will look at a number of ways to mentor and encourage our staff to develop their skills through Continuing Professional Development, continuing to learn and broaden their skill base, and equally importantly by creating a network of contacts with their peers.

We also have to challenge ourselves to "let go" and to freely share our knowledge and to learn to take pride in watching our charges develop.

In this paper we will also discuss the role of Professional Institutions and training providers and the importance of employers supporting the professional development of their staff by investing in membership of appropriate organisations and encouraging them to seek professional qualifications.

It is fair to say that sustainable long term management of Public Works is only truly possible if we have a well-trained, passionate, professional and sustainable workforce.

KEYWORDS: mentoring, sustainable workforce, succession planning, professional development.

1 Introduction

In many areas of Public Works Engineering there is an aging workforce and organisations often struggle to recruit new and retain existing staff. In this paper we will discuss the changing face of Public Works Engineering and the challenges we face in attracting, developing and retaining the next generation of Public Works Engineers. What do the emerging generation want and expect for their careers? How have things changed over the last 30 years and how can we adapt to meet this challenge?

2 A Changing World

2.1 A Job for Life?

In the past, through much of the twentieth century a career in Public Works Engineering was seen as a stable and long term choice. It

presented an opportunity to put down roots, and many considered it a "job for life".

However, this is not the case today. Constant pressure on government and council organisations has resulted in an uncertain future. Often there is pressure to downsize, and many organisations have outsourced key functions. Changes in government or council can often reverse the decisions made by previous administrations, resulting in further uncertainty and instability.

The new generation may not be seeking such long term certainty and stability. They seem by nature, perhaps as a result of a fast changing world, to be not only ready for change but actively seeking and embracing it. We therefore need a new angle in order to attract young people into the profession and to encourage them to stay and to drive Public Works Engineering forward into a new era of

sustainable, social and economic development.

2.2 A New Hope

It is important to understand what drives the latest generation of Public Works Engineers and what they expect from prospective employers?

A few common observations are that they:

- Look beyond today and want to be part of creating a better tomorrow
- Embrace and encourage change
- Are fascinated by and embrace advances in technology
- Can sometimes appear to be impatient and demanding
- Expect and indeed demand quick access to information through the internet and are a generation that loves to share information
- Want to know that they will have adequate support but also expect to be actively involved in guiding their career direction and progression.

So our challenge is really to recognise these traits and understand how best to harness their energy, motivation and commitment.

3 Recruitment and Retention

3.1 Recruitment

Recruiting is always a challenge. How do you attract the right staff and how do you convince them to join and then stay with your organisation?

The current generation of school leavers and tertiary education graduates are motivated in different ways compared to previous generations, but they are often driven by how they can make a difference to current and future generations, and at its heart this is what Public Works Engineering is all about. So is it just a case of pitching the same job in a different way?

If we can harness the enthusiasm and motivation of young professionals this can be a catalyst to create a momentum for change within our organisations, which can be refreshing and rewarding.

We need to understand this generation's drivers and expectations. How we describe the nature of the work and the expected career path are both important. Young engineers expect that time will be invested in their development and that they can progress in line with their growing knowledge and experience.

Over-ambition and inflated expectation also have to be carefully managed as sadly at times this is often described as the "I want it all and I want in now" generation.

When recruiting young staff, particularly young graduates, it is important to discuss the career development path and support that they can expect if they join your organisation. Often they will have several offers on the table and it is important that they look beyond the dollars on offer and weigh up which offer will present them with the best support and ultimately the better opportunity to develop their career in the medium-long term. This is a challenging concept for a young person often leaving university with a Student Loan to repay.

We will also need to be open to gender and ethnic diversity if we are to maximise the talent pool available. Rightly or wrongly some careers in Public Works Engineering have had an image of being a "middle-aged man's profession". We need to dispel that myth and make every effort to create a friendly, balanced and tolerant workplace if we are to actively engage with a wider pool of people.

3.2 Staff Development and Retention

Ongoing training, development and recognition of achievement are vital if we are to demonstrate to staff that we are keen to invest in their long-term future. Staff need to feel that they are valued however long they have been with an organisation.

Often during times when finances are tight, professional development through internal and external training courses and conference attendance etc. are sacrificed by organisations in order to reduce costs. The need for this can be recognised and understood by younger staff, but only if it is well communicated, put into context and seen as a temporary setback.

The author's own employer has developed a number of formal processes to help ongoing career development amongst their staff. There is an emerging leaders course for those with

perhaps 5-10 years' experience that show early signs of leadership potential. For more senior staff there is a leadership course which comprises three modules studied over three residential weeks, followed up by support in the workplace. Both of these courses have been developed in-house and have required a significant investment by the company. This clearly demonstrates their recognition of the need to develop strong leadership within the organisation and promote the personal growth of their current and future leaders.

There are also formal and informal mentoring programmes in place and other arrangements to help experienced staff support their younger colleagues' development through to chartered status where appropriate.

The organisation has also recognised the importance of meaningful annual Personal Development and Performance Reviews (PDPRs), where the manager and staff member jointly set goals and objectives, commit to working towards them and review progress together regularly during the year.

3.3 Exchanges, Secondments and Volunteering

Staff exchanges and secondments are a way by which organisations can provide diversity and new challenges for staff, perhaps also enabling them to get their "travel-fix" at the same time.

Staff can be given the opportunity to work at other offices within the same organisation, where this is possible, or at "partner organisations". Ideally this would be in a different location and even a different country, perhaps for a period from say 3-12 months, learning new skills and working in a different environment. This may appear to be challenging, problematic and possibly risky, but in reality it just requires trust and a little "give and take" from like-minded people and organisations, and can be beneficial to all if handled correctly.

Allowing staff to take time out for volunteer work with organisations such as Engineers Without Borders or Water Aid can be disruptive, but can also provide individuals with fresh challenges and opportunities that are rewarding to them personally and professionally. The importance of this to some individuals should not be under-estimated.

Staff recognise and appreciate the commitment employers are making by allowing them to pursue volunteer work and ultimately this encourages their ongoing loyalty to the organisation.

Often this type of work is very challenging but rewarding and it provides an environment where they develop as individuals, fostering characteristics and values that they ultimately bring back to their host organisation.

3.4 Mentoring and Succession Planning

Mentoring is a very important part in career development and young engineers need to feel that senior staff are taking the time to invest in their development. We certainly need to get over any lasting remnants of the "it took me years to get this knowledge and if I tell you I won't be needed anymore" attitude.

This generation has been raised in an environment where social networking and the internet are predominant, where open sharing of knowledge and information is both encouraged and expected. This certainly challenges and to a certain extent feels threatening to older generations.

However, once the "older generation" of engineers recognise and embrace the need to pass on information, many actually take great pride in seeing their "charges" develop and see that they are in fact passing on their "legacy" to the next generation.

For one of the authors of this paper who started work back in 1983, this is one of over twenty papers written and presented at an international conferences over a thirty year career. For the other, who started work some thirty years later in a very different world and is just embarking on his career, this is the first, hopefully of many. For an experienced author and presenter there is great pleasure to be taken in inspiring a young engineer to work jointly on a paper, to "take to the stage" and step out of their comfort zone to share in the experience of exchanging knowledge and ideas with their peers. This leads to greater confidence and often encourages them to put their hand up for other challenging assignments, perhaps to take a lead on authoring a report, writing a bid document or perhaps presenting the results of a project to clients or councillors.

Succession planning is a way to understand the key roles in an organisations' structure, who undertakes those roles and who is identified as being appropriately skilled and qualified to ultimately take over that role. This provides confidence that cover will be available if required in the short-term, but more importantly a plan is in place for the longer term.

One way to structure a succession plan is to identify the key role, those "ready now" and those say "ready in 2-5 years". This gives a good indication of strength in depth in the organisation and provides reassurance that key roles are covered even if the "heir apparent" takes a different role.

Encouraging these "next in line" staff to step into a role temporarily to cover for extended annual leave or if the incumbent is covering another role in a temporary capacity etc. is an opportunity to expose them to the challenges of the role and giving them an opportunity to learn and demonstrate that they are capable of stepping up into that role in the long term.

However, it is important to form a policy on whether those identified in the succession plan should be informed and effectively treated as "the heir apparent". This can give confidence to staff that they have a clear career path, but equally it can lead to division and resentment if others are not handled sensitively.

4 The role of Professional Organisations, Online Interest Groups and Training Providers

4.1 Professional Organisations

Over the last 5 years in particular, it is noticeable that professional organisations such as IPWEA, Water New Zealand and IPENZ have all invested in developing focus groups for younger members. This is perhaps a recognition that often these organisations were referred to by young engineers as "the old boys club" and perhaps irrelevant and somewhat disconnected from them. It is encouraging to see this development and employers should make every effort to encourage their young staff to become actively involved in these groups.

IPENZ for example has their "Engenerate" initiative, which focusses on young professionals under the age of 30 or those that have less than eight years' work experience. Similarly, Water New Zealand has their "Rising Tide" group.

Young IPWEA in Australia is set up to support young professionals under the age of 35. It is planned to establish a similar group in New Zealand and to link to the ENAMS group. These groups undertake university visits and host networking events and there are plans to develop mentoring schemes to support the development of young professionals by linking them with established "seasoned" professionals for support and guidance rather than specifically targeting a specific goal such as CPEng qualification.

Through such groups young engineers can create professional networks with their peers that will stay with them and develop further throughout their careers. They will gain in confidence, develop their communication skills and enhance their personal and professional development.

4.2 Online Interest Groups and Blogs

Engineers today have access to a number of other avenues by which they can connect with their peers. Online interest groups, blogs, and social networking sites that are aimed at professionals, such as Linked-In, provide an environment where knowledge and information can be shared and engineers can feel part of a wider network. The IPWEA "ask your mates" forum is also a great example of this type of knowledge sharing and mutual support mechanism.

When Public Works Engineers are working in remote councils or consultants offices they often feel personally and professionally isolated, and these online groups can help by providing them with much needed technical and moral support.

Participation in these online activities should be tolerated as a minimum and encouraged where possible, as this is an appropriate use of time and internet technology in a professional environment.

4.1 Training Providers

There are a number of training providers such as the New Zealand Water and Environmental

Training Academy (NZWETA) in New Zealand and the Water Industry Training Institute (WITI) in Australia, that offer a range of qualifications for Public Works Engineers. These training providers recognise that the technology has changed significantly in recent years, requiring a different set of skills in the workplace, and that the latest generation embrace technology and learn in different ways.

In addition or as a replacement to traditional classroom teaching, many training organisations are recognising that webinars and on-line training courses have a number of advantages, particularly when combined with some classroom or preferably on-site learning and evaluation.

We should not under-estimate the importance of qualifications as a recognition of demonstrated competence in a subject or work function. Providing opportunities for all staff to attain further qualifications and recognition of this achievement are key to staff satisfaction and ultimately retention.

5 Conclusions and recommendations

In many areas of Public Works Engineering there is an aging workforce and organisations often struggle to recruit new and retain existing staff. In this paper we have discussed what drives the latest generation and how we can harness their energy, motivation and commitment.

Mentoring, succession planning, ongoing training and professional development all have a key role in achieving a sustainable workforce. Equally we need to try to facilitate where appropriate opportunities for staff exchanges, volunteer work and participation in professional organisations.

5.1 Passing the Baton

At the end of the day, we all entered Public Works Engineering because at some level we wish to serve our communities now and to create a safe and economically sustainable environment in which they can thrive. We want to leave our communities in a stronger position than when we entered the workforce.

At some stage we need to pass the baton on to the next generation, and it is our duty, our responsibility and indeed our privilege to pass on what we have been taught and the

knowledge we have assimilated through the years.

Once we recognise this, somehow we see things differently. We can then help the next generation of Public Works Engineers grow into the role and we can then rest assured that that we have helped create a sustainable long term workforce and that the future of Public Works Engineering will be in safe hands.