Transformational leadership in changing a research culture

Peter Hogg discusses the challenges and pitfalls of changing focus in a complex organisation.

Introduction
Towards the end of 2010, I went to a parent’s evening at my son’s school. Whilst there a homemaker friend came up to me and said jokingly: ‘have you retired?’ She did not need to clarify what she meant, because I knew what she meant. Then I explained why in recent times, I have been engaged with extensive activities working towards something new and innovative. The longer explanation commences in this article, which is the first in a series of three.

With the emphasis on transformational leadership, in this article I shall explain the culture change that has occurred within my university and the Radiography Directorate, how that transformation was facilitated and why in the longer term I believe the change should have positive effects.

Firstly I would like to take you back to 2004, because that year presented a typical illustration of what characterised research in the University of Salford’s Radiography Directorate.

The context
In mid 2004 we had a steady flow of conference and journal papers and several staff were studying doctoral awards in support of their research careers. There was a modicum of joint team working for research and some of the dissertation student work related to that activity. We also had three full-time PhD students.

On reflection, the conference and journal material we produced was of good quality, but had an eclectic nature and it was driven by personal interests; fairly typical of university radiography departments at the time, both nationally and internationally. Importantly at that time, the individually-focused work did not present a problem because our university valued what we did and the radiographic community seemed to appreciate it.

March 2009 however, brought significant change. Diversity in our research was no longer to be encouraged and the notion of isolated researchers was to become a thing of the past. We were to work towards interdependent team-based research and in April 2009 I was asked to lead the establishment of the new diagnostic imaging research unit which would have a clear clinical imaging focus. 2009 brought the University of Salford a new Vice Chancellor (VC), shortly after this a new senior leadership team was appointed, a vision for our university was agreed and implementation commenced. The basic plan was to become more research-led within our curricula and also ‘up our research game’.

One driver for the latter is related to improving our research output for future national research assessment exercises. The leadership for the school in which radiography sat decided that its research focus would be clinical; this appeared to us to be a logical decision because within our school we had a prominent and highly successful clinical rehabilitation research unit. (‘Disciplines included within this school include: physiotherapy, radiography, sport, podiatry, prosthetics and orthotics and occupational therapy’)

A consequence of this was that in March 2009 radiography was faced with a choice - do clinical research related to imaging or don’t do research at all. If we were to be the latter decision, those who were research active (clinically) would be encouraged to apply for accommodation within the school. In reality that would have meant that only two or three out of 17 academic staff would have been encouraged to do research.

I felt, and still do feel that my school showed good leadership in this decision Why? Firstly because it demonstrated that it had a vision – in radiography departments we would do imaging related research. Secondly because by sharing its vision it empowers radiography to define its own direction – the specific details of the imaging research would be left to the radiography staff. This gave us a fantastic opportunity to shape our own future, this is well-documented in leadership literature as an important catalyst in making people feel valued and empowered.

This approach also has many positive personal and organisational benefits. There were caveats though; our research could only have breast cancer (specifically mammography) and also SPECT-CT as the focus, we must achieve ‘great things’ – unspecified at the time – by 2017; there would be no lone researchers; and our research would be multi-professional and collaborative. Collaborative meant there was a need to include people from outside the University of Salford into our research teams. Breast and SPECT-CT appeared to have been selected by our school because there was limited, but existing, clinical research into these areas and the philosophy of it was in line with school requirements. It might be worth noting that our educational research did not fit with the new agenda and much of this had to be phased out. For the latter, that which we continued to do was of less importance.

A premeditated approach to change
In previous management posts and in previous non-management leadership positions, I have been a firm believer in and advocate of, the use of transformational leadership principles. I also acknowledge that many radiography directorate colleagues are from a similar mould. In particular I value the transformational leadership characteristics set out by Kuznes and Posner (Figure 1) and in the NHS Leadership Qualities Framework (Figure 2), several of these leadership traits described are highlighted in bold within this article.

Transformational leadership is a set of principles and behaviours which enable transformation to occur through others. I knew this would be important because there would be a need to influence professionals across our university and also within clinical and other external settings too. At the end of the working day during the early stages, I often reflected upon events of the day, and using leadership literature I tried to see different ways of moving forwards. I tried to see different ways of moving forwards

To work on the following day. Here are some examples of situations I met and the leadership solutions I used to help resolve them.

Resistance to change was anticipated and it was not surprising when it arrived. Several reasons accounted for it but the most prominent was related to the two research areas not aligning to individual interests, expertise or individual perceptions of what should be done. Over a prolonged period, using a highly democratic process, staff were enabled to shape their own future. I needed staff buy-in and commitment, as without this we would go nowhere.

Initially, a big concern for several staff members surrounded the research paradigm, a majority of them had trained to be qualitative researchers and they felt this dimension should exist within our research vision. Voices were heard, and curiously, research paradigms were not specified as part of the external mandate so an illusion of qualitative research was easily accommodated into our vision. By May 2009 the Directorate had a shared view on our
proposed research, albeit some staff members were still not fully sold on the idea. Acknowledging that people manage transitions at different speeds, since then with other directorate staff, I have worked to encourage and support those not fully sold on the vision to a point where we almost have complete alignment. During this period I spent a lot of time listening to peoples views and meeting them in 1 to 1 face to face conversations. I found this form of interaction to be valuable as it allowed me a chance to get to the nub of individual concerns. You might be interested to know that from the onset within the directorate, we encouraged people to show their feelings, but we had a condition on this matter. We agreed, as a directorate, that it would be acceptable to talk openly amongst ourselves, but it would not be acceptable to air any negative feelings outside our own department – we had to demonstrate an external united front. The period of listening to staff concerns and helping people to let go of the old and welcome the new was a good investment of my time and other directorate staff too, because I feel quite certain it helped others cope with the change process and helped me to understand concerns that hadn’t occurred to me. During the initial period of change I tried to keep at the forefront of dialogue that we had a great opportunity – we could shape our own future. Not all university departments had that opportunity. Even so, almost two years on, there is a minority who are not fully sold on the idea but wish to go along with it; realistically I don’t think 100% full commitment is in the mind of the stick users. Planning out the facilitation and empowerment for individuals appeared to welcome the foci and many really aligned their dissertation proposals. Similar to our other MSc dissertation students (radiographic reporting and GI) they still have the opportunity to focus their research into any area they chose – so students are no worse off than previously.

At our first directorate meeting to open the discussion, I was the postgraduate student. I explained we had provided a fertile environment in which staff, students and others might enter a new phase in a productive and encouraging atmosphere. Political astuteness and strategic influencing has been a critical component of what we do and I suspect for the first time my title as professor has opened doors. Using my title has been related to my influence and ability – and practically – to bring things into play. For perceived and real commitments, planning for and committing to an exit strategy is important. I have a feeling that to be successful you must be able to let go of the past by acknowledging the need for change and to believe in where you are going. If not then you are likely to waste energy, emotion and time looking over your shoulder and trying to do things that are important to you, and not that important to the corporate vision.

A reflection

At the time of writing this article it is 22 months since the start of our new culture and research focus. My impression is that individually and collectively we have moved a considerable distance to attaining our ambition. I am told by many that the experience of changing the culture has been positive and presently, because of better alignment in our research topics, we are finding that one innovation/discovery can assist another staff member working on a related topic. This sort of phenomenon is quite interesting because we are also finding that the pressure by one is more easily shared and valued by another.

To be fair, my university is fully supportive of further building its diagnostic imaging research and this is true at all leadership and management levels. Actually, given the current economic situation, I am impressed that they continue to support our endeavours.

The final leadership characteristic I wish to mention is being a ‘trusted advisor’. This can mean only be approachable within the directorate. In some instances this judgement can only be made by the person of the stick user. I acknowledge that a point would arise when individually and collectively we would be held to account. This was the obvious end point by which we must have achieved the conditions set of the transition process. But along the way there would be targets that would need meeting too and these would be reviewed annually. Whilst I have not considered failure as an option I did realise that if we did not succeed then the end of radiography related research would have been highlighed too; indeed I am told they have been highly influential too. Empowerment would be twofold: personal and professional dimensions too, for instance taking risks and providing a positive climate. Political astuteness and strategic influencing has been a critical component of what we do and I suspect for the first time my title as professor has opened doors. Using my title has been related to my influence and ability – and practically – to bring things into play. For perceived and real commitments, planning for and committing to an exit strategy is important. I have a feeling that to be successful you must be able to let go of the past by acknowledging the need for change and to believe in where you are going. If not then you are likely to waste energy, emotion and time looking over your shoulder and trying to do things that are important to you, and not that important to the corporate vision.

Not surprisingly this is illustrated in the literature, Figure 3.
about ‘trauma imaging’. Presently a high proportion of our MSc dissertation student dissertations are focused to an aspect of our research, indeed I firmly believe the foci have attracted some students to study our dissertations with it.

After the two MPhil/PhD students have completed their study with us – February 2011 – our remaining five will have their focus on our new research areas.

To a greater or lesser extent all our academic staff now have an involvement, with seven having a research time allocation varying between 20% to 50%.

We also have 12 honorary clinical research appointments within our research team, and a growing number of clinicians are becoming centrally involved in our research work. Within our university we have an interdisciplined dimension to our research too; this includes physics, psychology and occupational therapy. We have attracted a medicolegal, academic staff exchange to conduct research and also funding for a two year research related appointment.

It is worthwhile recognising that the focus of the research did not take place in a void; the directorate has a number of areas of internal and external funding and this has supported 

International scientific exchange 

In addition to our academic research teams, we have established a number of collaborative local and international academic research partnerships. In addition to the academic research teams, we have established a number of collaborative local and international academic research partnerships.

A good example of this relates to the BSc Radiography programme. A complicating factor for the teaching related activities from additional teaching requirements related to quality enhancement and ‘other significant matters’, these too required additional human resources. The net effect of this research and teaching requirements resulted in conflicts in human resource demands and shortage, particularly for the BSc programme leader, who required to propose solutions and then implement change.

Of prime importance was the student experience and at all costs, that had to be preserved. Changes implemented associated with the BSc programme included: planning meetings in advance; amalgamating meetings; streamlining the personal tutoring process; standardising documentation; moving from double marking to moderation; and creating small cluster groups of staff who would work on short term goals in similar areas – ensuring there is no overlap of effort.

One successful change, introduced to improve the quality of student placement experience, has actually brought about a serendipitous integration of both teaching and learning. This has involved leaders from both teaching and learning and research working closely together.

Alongside this, for the BSc programme, the clinical learning manager recognised the importance of the change and therefore included research as an item on our faculty agenda. This enabled that section of our clinical colleagues to gain an insight into our new research agenda.

Over the past 22 months I have received to totally immerse myself in the new areas in order to get a feel of things going and it has been a truly exciting and consuming commitment. During the transition process, because of methodological design and time commitment requirement, collection I have had to be a little quicker than the radiography public eye.

Presently we are sitting on the verge of submitting our new work to journals and conferences. Initially I predict that the volume might be less than previously, but hopefully the quality should be better. I also anticipate our publication frequency will rise over the next few years.

In the next two articles I shall outline the research we are now engaged with and importantly why we chose our specific lines of enquiry.

What would I do differently next time? Faced with similar circumstances in the future, would I do differently next time? Only one thing - try to progress the change process at a faster rate. I suspect this reflects the kind of person I am (eager).

How might you approach these and whose support would you need?

Sophie Rolfe, specialist cardiac sonographer (left), with Dr Bev Tsai-Goodman, consultant cardiac radiologist, at the Toshiba Aplio XG ultrasound scanner.

Salford University radiography lecturer, Dr Bev Tsai-Goodman, said: ‘The Aplio XG allows us to produce high-quality images with clarity and high resolution. The cardiac radiology programme facilitates optimisation of the images acquired with simplicity and precision. The very nature of fetal echocardiography demands a user-friendly and ergonomic platform and the Aplio XG provides this with ease. The addition of this equipment has allowed our service to both grow and continue to provide a high level of care to our patients, which we hope will long continue.’

At the World Federation of Radiology Conference, Cape Town, in September 2010, Dr Duncan Wheatley, clinical oncologist, Seated (from left): Philippa Robins, radiotherapy manager; Ben Ainslie; Sharon Tatlow, senior radiographer; and Mike Hayden, CT business oncology manager, Philips; Rob Davies, general manager, central business oncology manager, Philips; Mike Hayden, sales director, imaging systems, Philips, in front of the new Philips Brilliance CT Big Bore Oncology and Pinnacle® SMART Enterprise treatment planning facilities at the Sunrise Centre, Royal Cornwall Hospital, a dedicated regional oncology centre.

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Fujifilm launches its first portable diagnostic ultrasound system into the UK

Fujifilm has expanded its range of products in the UK with the introduction of a first ultrasound system, fuzone CL, a portable, light-weight ultrasound system offering high image quality on a large 10” screen, making it ideal for hospital wards and outpatient departments, as well as examination rooms or vehicles. It is ergonomically designed to provide user-friendly operation, with easy-to-use large buttons, which are cleverly grouped according to examination mode.

The system is equipped with a ‘sound speed correction’ function for faster, clearer examinations, based on Zone Sonography technology, which transmits a broader ultrasound beam to collect extensive echo data immediately by using large zones. This makes a new, advanced image processing environment possible.

Inselspital in Bern begins radiotherapy treatments using Varian’s TrueBeam system

A leading Swiss cancer clinic has begun delivering advanced radiotherapy treatments using the TrueBeam system from Varian Medical Systems. More than 40 patients have been treated using the new system for fast, precise radiotherapy and radiosurgery since clinical treatments began at Inselspital, the university hospital of Bern. “Treatments with TrueBeam are very quick and delivered with great precision,” said Professor Daniel Aebersold, director of radiation oncology, “and studies have shown that increased dose delivery rates can potentially lead to higher cure rates. Sought after TrueBeam will need to be further validated through longer-term clinical trials. At this stage using TrueBeam mainly for patients with large tumours, such as you often find with cervical cancer, anal cancer and advanced head and neck cancer.” Inselspital has become the 11th hospital in Europe to commence clinical treatments using TrueBeam.

Toshiba ultrasound scanner makes way to St Michael’s Hospital Bristol

The fetal cardiology department at St Michael’s Hospital Bristol recently purchased a Toshiba Aplio XG ultrasound scanner. The University Hospitals Bristol NHS Trust provides tertiary level cardiac screening and diagnostic services to the obstetric ultrasound departments within the south west region. Although primarily purchased for fetal cardiology, the comprehensive cardiac package on the system also allows it to be used for adult patients within the Trust.

Dr Ben Tai-Sai-Goodman said: ‘The Aplio XG allows us to produce high-quality images with clarity and high resolution. The fetal cardiology programme facilitates optimisation of the images acquired with simplicity and precision. The very nature of fetal echocardiography demands a user-friendly and ergonomic platform and the Aplio XG provides this with ease. The addition of this equipment has allowed our service to both grow and continue to provide a high level of care to our patients, which we hope will long continue.’

How to use this article for CPD

You may find this article interesting purely from the research perspective. Do you think it is good advice the university research in radiography should have a clinical focus only?

What about research into education and learning, are these not also the core business of university medical imaging and radiotherapy departments? What is your perspective on this?

The article can also be considered from the point of view of designing and managing change. Would staff and service managers wish to approach it from this angle.

Do the processes described have any implications for change management in your department? Are there lessons to be drawn or tactics to be tried?

If you are a practitioner without a designated leadership or management role are there any implications here?

Do you have any aspect of your practice that you would wish to change, or cultural changes you would like to bring about in your department?

How might you approach these and whose support would you need?

Sean Kelly, CFP Officer

About the Author

Peter Hogg is a Professor of Radiography at the University of Salford. This article is partly based on a paper (Leadership in research) which he delivered at the World Federation of Radiology Conference, Cape Town, in September 2010.