chartered management institute

inspiring leaders

Innovation, Universities and Skills Select Committee

Inquiry into Engineering

Memorandum from the Chartered Management Institute

14 March 2008

MEMORANDUM IN RESPONSE TO INQUIRY INTO ENGINEERING

Executive Summary

- The Chartered Management Institute welcomes the opportunity to submit written evidence to the Innovation, Universities and Skills Select Committee as part of its inquiry into Engineering.

- The focus of this submission is the state of the engineering skills base in the UK and the critical need for engineers to have management and leadership skills.

- There are around 194,000 managers within the science, engineering and manufacturing sectors, the fifth largest number of managers in any sector represented by a Sector Skills Council. In addition, the Institution of Mechanical Engineers estimates that 76 per cent of professional engineers have a significant managerial function: for 36 per cent their main function is managerial; while for 24 per cent their main function is technological; and 40 per cent share both functions equally.

- It is by providing appropriate management and leadership skills to those with specialist engineering and technology skills, that individuals will be able to identify clearer career pathways through to management roles for which they will also be better equipped and prepared. This is a critical factor that could improve both the attraction and retention of highly-skilled engineers by employers, and will also drive organisational performance through better management and leadership.

- The Institute's latest research published on 13 March 2008 "Management Futures: the World in 2018" examined the future skills needed for organisations to stay productive and competitive. Successful engineering companies in 2018 will be those with the leaders and managers who have the foresight to identify changes in the market. There will be a greater fluidity of skills and movement across different environments, with management skills, collaboration and political skills becoming critical alongside technical expertise. Engineers will need the vision to create synergy across different activities and be capable of harnessing innovation to deliver business results.

- Our overall recommendation is that, following on from a strong recommendation by the Committee, the Institute, in partnership with SEMTA, the Engineering Council and all its associated professional bodies in the sector, maps more closely the sector's management and leadership needs in order to develop and deliver professional management qualifications for engineers.

1. Introduction

1.1 The Chartered Management Institute (The Institute) is the only chartered professional body dedicated to management and leadership. We support 79,000 individuals and 400 corporate members and have a high level of engagement with employers across all sectors. Our members are employed at all levels of management within business, public sector and not-for-profit organisations.

1.2 Through the Management Standards Centre (MSC), the Institute is appointed by Government (QCA, DIUS, SSDA) as the Standards Setting Body for Management and Leadership. The MSC sets and maintains the National Occupational Standards on Management and Leadership, which is a national source of guidance for all those working in management.

1.3 The Institute works to promote management and leadership (M&L) skills across all sectors, and as such sets out its comments below. We focus on the role of the Institute, as a leading chartered professional body, in the promotion and development of management skills for engineers.

2. The business case for better management and leadership skills

2.1 We believe that the Committee's final report should recognise the value to the engineering sector of improved management and leadership skills. To achieve an economy based on world class skills, UK employers will need to address critical management and leadership skills across all engineering sectors. We have set out below the business case for improving management and leadership skills at all levels.

2.2 The overall need for better M&L skills in UK businesses has never been greater. The challenges of global competition, demographic imperatives, worldwide economic uncertainty and moves towards a knowledge economy provide new incentives for UK managers to improve their skills and thus respond to commercial pressures.

2.3 As the Cabinet Office Performance and Innovation Unit's 2001 Report on workforce development concluded[1], demand for skills is derived from wider management strategies, and these therefore need to change if we are to successfully make the transition to a high skills, high added-value economy.

2.4 There are around 194,000 managers within the science, engineering and manufacturing sectors[2]; the fifth largest number of managers in any sector represented by a Sector Skills Council. In addition, the Institution of Mechanical Engineers estimates that 76 per cent of professional engineers have a significant managerial function: for 36 per cent their main function is managerial; while for 24 per cent their main function is technological; and 40 per cent share both functions equally[3].

2.5 The number of managers in the UK is predicted to grow by 1.3 per cent per annum between now and 2014, with growth now predicted to be faster than originally envisaged. The current estimate is that around 4.5m individuals in the UK have significant management responsibilities[4], yet 36 per cent of organisations report that their managers are not proficient.

2.6 The business case for improving management and leadership skills is clear. Research based on longitudinal data and published by the Institute[5] indicates that those employers who take responsibility for M&L development experience better overall organisational performance over a four year period. The research also shows that companies that provide training whi*ch is aligned to the organisation's strategic business* needs benefit most strongly.

3. UK plc and international competition

3.1 Despite a move in the right direction, unless Government, employers and skills delivery bodies prioritise management skills for current and future leaders, there

---

[1] *In Demand – Adult Skills in the 21st Century.* A Performance and Innovation Unit Report – December 2001
[2] *Working Futures Sectoral Report 2004-2014*, January 2006
[3] Institution of Mechanical Engineers website, http://www.imeche.org/industries/management/cmi/
[4] Ibid
[5] *Management Development Works: The Evidence*, Dr Chris Mabey, Chartered Management Institute 2005; *Achieving Management Excellence*, Christopher Mabey and Andrew Thomson, Chartered Management Institute, 2000

is a real danger that we will not make the right management decisions to improve UK's international competitiveness. It is the skills and capabilities of leaders of organisations that determine how people are employed and whether resources are invested effectively. Particularly in the engineering sector, where foreign competition is strong and growing, this need to improve global competitiveness is essential.

3.2 The productivity gap between the UK and other leading nations has proved an intractable issue for successive governments. Up to 20 per cent of that gap is now attributed to skills provision. For example, differences in management practices between the USA and the UK explain 10 to 15 per cent of the productivity gap in manufacturing between the two countries. [6]

3.3 In addition, the Department for Education and Skills' research paper, "Managerial Qualifications and Organisational Performance" (Bosworth, Davies and Wilson, 2002), identified the following key findings:

- Highly qualified managers are more innovative. They appear more likely to adopt strategies introducing new, higher quality products and improving the quality of existing products, while less qualified managers are more likely to be engaged in increasing the efficiency of the production of existing products and services;
- Better qualified managers are associated with a better qualified workforce;
- Management proficiency and performance appear to be positively linked (although this is a two-way relationship).

4. Engineering sector profile

4.1 The engineering sector is heavily dominated by small companies; 94 per cent of engineering establishments employ fewer than 50 people.[7] Therefore, M&L skills provision must be specifically targeted at small and medium sized enterprises (SMEs), which can be hard to reach. SMEs can also find it difficult to find the time to release employees for training and development, meaning that innovative, more flexible training solutions must be offered.

4.2 SMEs are also potentially less able to cope with changing working practices such as part-time and flexible working. Properly qualified, professional managers will be better equipped to respond to growing demands for flexible working and new working arrangements, as the Government continues to introduce reforms and new workplace rights.

4.3 Moreover, recent research published by the Institute[8] demonstrates the link between poor management performance and both low productivity and high reported levels of workplace ill-health. For example, the most widely experienced management styles in the engineering sector are reactive (35 per cent), bureaucratic (26 per cent) and authoritarian (25 per cent)[9], with all three becoming increasingly common. Good management can reduce these stress factors and thereby drive higher productivity, lower costs and deliver social benefits through decreased absence levels.

4.4 The most significant positive net requirements for labour in this sector (for the period 2005-2014) are expected to be in relation to managerial occupations (an

---

[6] *Management practices across firms and nations,* Bloom et al., LSE-Mckinsey, June 2005, quoted in the Leitch Review final report, 2006
[7] Science, Engineering and Manufacturing Sectors Skills Council Sector Skills Agreement, 2007
[8] *The Quality of Working Life: Managers' health and well-being*, Worrall and Cooper, Chartered Management Institute, October 2007
[9] Ibid

estimated 45,800 people), closely followed by skilled trades[10]. Therefore, it will be important for the sector to recruit and develop skilled managers and leaders. This presents a good opportunity for the sector to improve management and leadership skills across the board, and we urge the Committee to recommend that the sector implement not just technical skills training (such as tool setting and metal working) but management and leadership skills solutions as well.

4.5 Last year, 20 per cent of UK engineering establishments reported a gap between the skills of their current workforce and the skills required to deliver their business objectives[11]. Whilst these skills relate more to vocational skills (eg. technical and engineering skills) than to management and leadership skills, M&L skills will also be important in terms of delivering business objectives.

5. Delivering a qualified workforce – addressing future skills needs

5.1 We have highlighted the general lack of qualifications in the engineering sector. We would also point out that the UK's management population is also significantly under qualified: under 40 per cent of managers are qualified in any discipline to Level 4 or above compared to 81 per cent of those in other professional occupations.[12] Also, fewer than 20 per cent have a specific management qualifications[13]. This is reflected in the fact that employers report deficiencies in management skills, and the high failure rate of SMEs, which is in part due to UK companies competing less on unique value and innovation than their peers from other advanced countries.[14]

5.2 The Institute's latest research published on 13 March 2008 "Management Futures: the World in 2018" examined the future skills needed for organisations to stay productive and competitive. Successful engineering companies in 2018 will be those with the leaders and managers who have the foresight to identify changes in the market. There will be a greater fluidity of skills and movement across different environments, with management skills, collaboration and political skills becoming critical alongside technical expertise. Engineers will need the vision to create synergy across different activities and be capable of harnessing innovation to deliver business results.

6. Professional bodies delivering professional qualifications

6.1 While an academic qualification may denote an individual's competence and knowledge at a given point in time, it does not always provide evidence of the application of skills and an individual's practical impact in the workplace. Professional qualifications can combine evidence of impact with evidence of relevance through continuing professional development programmes.

6.2 The Chartered Bodies in particular are instrumental in defining the standards for their professions and the qualifications that recognise learning and skills. Evidence demonstrates that many more people take professional qualifications, usually paid for by their employer, than take NVQs or post-graduate academic qualifications in management-related fields as evidence of the relevance of what they do.

---

[10] Ibid
[11] Ibid
[12] *Labour Force Survey data, March-May 2002*
[13] *Final Report of the Council for Excellence in Management and Leadership, 2001*
[14] *UK Competitiveness: moving to the next stage.* DTI Economics Paper 3 by Prof. M Porter and Christian Ketels. May 2003 (Harvard Business School/ESRC)

6.3 Recent Institute research into the "Value of Management Qualifications"[15] includes a case study of the Team Silverstone development programme which combines classic classroom learning with practical track-side activities. The modules taken as part of the programme can provide the foundation for an Introductory Certificate or Introductory Diploma in Management accredited by the Chartered Management Institute.

7. The Institute's offering to the engineering sector

7.1 The Institute works across the engineering sector to promote management and leadership skills qualifications. The Institute has established a partnership with the Institution of Mechanical Engineers (IMechE), enabling its members to gain the Institute's Diploma in Management (level 5) via a fast-track syllabus. The collaboration recognises the high level of management responsibility held by professional engineers. The Institute mapped its Diploma in Management against IMechE's Chartered Engineer qualification and found that 50 per cent of the content was similar. Thus IMechE Chartered Engineers can gain the Diploma in a shorter timescale.

7.2 To date an initial pilot scheme is in progress, and the Institute is working with the Engineering Council to roll out such partnership arrangements to all Chartered Engineer awarding bodies in due course. Once Chartered Engineers have gained the Diploma qualification, they can go on to gain Chartered Manager status (see below for further details), which is the recognised measure for professional management capability.

7.3 It is also important for the Committee to acknowledge the value of continuing professional development (CPD), in addition to the more traditional formal academic qualifications such as A levels or an MME-related degree. CPD can provide a clear pathway into engineering-related careers, if new graduates can see the route towards management positions within a company, rather than being confined to technical roles.

8. How employers can deliver a more skilled workforce

8.1 The Sector Skills Agreement developed by SEMTA for engineering states that "employers in the [engineering] sectors are generally less likely to have a training plan (46 per cent) than the average for the UK economy as a whole (55 per cent)." The same patterns pertain to training *budgets*, with employers from MME sectors running several percentage points below the UK economy average. The Committee should, therefore, define training more precisely and make recommendations about M&L training for engineering sector companies.

8.2 The Institute's own research has explored the value of management training and development.[16] The Institute found that competency-driven management and leadership development (MLD), MLD driven by strategy, and giving employers responsibility for MLD, had the greatest positive effect on organisational performance.

8.3 When delivering training, it is very important that effective M&L training is given, provided by a qualified training provider and that any qualifications are fully accredited to an external nationally recognised standard. Employers with non-accredited in-house learning and development activities should consider the added-value that recognised management qualifications can offer in terms of

[15] *The Value of Management Qualifications: The perspective of UK employers and managers.* P Wilton, P Woodman and R Essex, Chartered Management Institute, September 2007

[16] *Management Development Works: The Evidence, Dr Chris Mabey,* Chartered Management Institute, 2005

employee motivation, the ability to attract staff and the organisation's professional reputation.

9. Chartered Manager – the national measurement of management capability

9.1 The designation of "Chartered Manager", introduced by the Institute in 2003, enables individuals with a management qualification and a significant commitment to CPD to gain externally validated recognition of their ability to deliver significant change in their workplace.

9.2 The six core leadership and management skills areas required to achieve Chartered Manager status[17] are explicitly aligned to the skill areas identified in the National Occupational Standards for Management and Leadership. It therefore provides employers with a benchmark for professional management. As such, it could be promoted more widely by SEMTA to help drive demand for professional managers in the engineering sector.

9.3 Our website (www.managers.org.uk/charteredmanager) contains numerous case studies and testimonials describing how individual managers have benefited from becoming a Chartered Manager, for example managers from engineering companies such as BAE Systems, Rolls Royce, as well as from related companies, eg. Northern Ireland Electricity, EWS Railway Ltd, the Royal Air Force and the Royal Navy. Managers who have achieved the award cite numerous benefits, including: personal career advantages in terms of greater employability and promotion prospects; improving their ability to apply their management and leadership skills; and boosting their business knowledge, self-awareness and confidence.

10. Policy recommendations for skills training

10.1 In order to assist the Committee in promoting best practice in terms of improving management and leadership skills in the workplace, we have set out below some policy recommendations which should be applied to managers working within the engineering sector:

10.2 By 2020, at least 50 per cent of engineering managers should be qualified in management to level 4 or higher. This could help the sector attain its business performance goals and maintain international competitiveness.

10.3 Chartered professional bodies should be acknowledged by the Sector Skills Councils as a source of high quality learning and development in their specific fields, and SSCs should refer employers to the Institute's wealth of information and advice on management and leadership issues.

10.4 Chartered Manager should be established by 2015 as a benchmark against which engineering firms and Government can recognise and measure professional management capability.

10.5 We believe that the Sector Skills Council for the engineering sector (SEMTA) should focus on promoting those higher level professional skills that, in their practical application, will have the greatest impact on both performance and also on leveraging the rest of the skills agenda. Professional managers play an essential role in developing strategies for workforce development. A great

[17] Leading people, managing change, meeting customer needs, managing information and knowledge, managing projects, processes and resources, and managing oneself.

number of highly qualified managers are more likely to ensure that their teams are adequately trained and can help to embed a culture of learning and development that helps drive performance.

10.6 Our overall recommendation is that, following on from a strong recommendation by the Committee, the Institute, in partnership with SEMTA, the Engineering Council and all the professional bodies in the sector, maps more closely the sector's management and leadership needs in order to develop and deliver professional management qualifications for engineers.

For more information contact:

Petra Wilton or Philippa Tucker
Public Affairs Department
Chartered Management Institute
2 Savoy Court
Strand, London WC2R 0EZ
Tel: 020 7421 2708
Fax: 020 7497 0463

E-mail: policy.development@managers.org.uk
Website: www.managers.org.uk