

The Expatriate Library Director

Susan McKnight
Director of Libraries and Knowledge Resources
Nottingham Trent University
sue.mcknight@ntu.ac.uk

INTRODUCTION

'How transplantable are senior librarians? In a previous life I knew everybody that counted in the profession and in the periphery thereof, the government, the industry etc. That was the value I added in my job: my network. Move me to another country, and all that is gone. Not to mention moving to a non-English speaking country. A move to a new country means that my market value plummets. I don't have the technical skills any more and I have a lousy network.'

I have been asked to address the above anonymous quotation/question from the perspective of a senior library manager who, in a moment of quiet contemplation, decided that I would like to gain experience working overseas. It was a short period of contemplation, and perhaps just as well as considering the risks, challenges and potential consequences for too long may have been a deterrent. However, my experiences through life have identified that risk taking can bring huge rewards and, on a personal level, I am always looking for a challenge.

The experience I draw upon relates to my move, in August 2004, from one university in Australia to another in England, with a very similar remit of responsibilities. I had an open mind about the challenges of changing job, house and country in one go and didn't ever consider the possibility that the transition would not be successful.

A SHORT ANSWER TO THE ORIGINAL QUESTION

The value of one's network cannot be overstated. However, three things come immediately to mind.

Firstly, it was largely through my networks that I was able to secure a job overseas in the first place. When I made my mind up that I wanted a change, my UK network sent me information on positions, salary comparisons and answered my questions about living in England. They then acted as agents by referring my name to head hunters. My network in Australia was not local, regional or national, but international, so a senior librarian can probably contact a number of colleagues in most countries of the world if professionally active, in my case in online and distance learning associations and through the International Federation of Library Associations (IFLA). Also, many of my vendor contacts work internationally, so I either have the same contact, or someone who knows someone that I know when I am dealing with vendors. It seems a very small global village on occasions. Library trade exhibitions prove it!

Secondly, senior managers understand the importance of networks and deliberately go out to establish new contacts. In my case, as mentioned, my UK network turned out to be very helpful. However, one of the first things I did when I started my new position at Nottingham Trent University, was to identify who were the decision-makers and leaders in my new organisation, and I set

about establishing relationships with these key people. So, I was creating a network in my new organisation.

Finally, it is true that I didn't have the networks into the UK government or some other local organisations that I had in Australia. However, I do know who to ask, or how to find out who to ask, if I need to make a new contact. So, it is not only who you know, but how to find out who to know. After all, we are librarians, and finding information is one of the things we do best.

Language is clearly a barrier, especially if you do not speak the local dialect. In my case, I speak Australian English, a version of the 'Queen's English' that makes me mostly understood in the United Kingdom. However, in the UK there are many, many dialects of English spoken. While my language difficulties are small in comparison to those who have no command of the national language, there are interesting challenges in translating some requirements, or simply fitting in. Do I keep saying 'G'day' or do I learn the usual Nottingham greeting 'Yo al'right?' When speaking about staff who are timetabled to the enquiry desk, do I ask about 'rosters' or the 'rota'. These examples are trivial, but I had not contemplated the extent of local variations that I would find in England. Sometimes, it is not the words, per se, that are the barrier to understanding, but the pronunciation and accents. Other interesting language-related differences are perhaps sense of humour, irony and understatement. I am sure that I am categorised as direct and forthcoming when compared to those with whom I work. Is this related to my Australian origins or because of my personality?

Does your value plummet when you move to a new country? My employer in the UK didn't think so, or they wouldn't have recruited me from Australia. Do I think I provide value? Time will tell, but I feel that I have made significant contributions to my new organisation and team thus far.

SENIOR LIBRARIAN OR LEADER/MANAGER?

I believe a key question in this debate on expatriate senior staff is not about the professional or technical skills, but the managerial and leadership skills a person brings to a new post in a new country. In my case, I had professional qualifications in librarianship, tertiary qualifications in business and public administration, and extensive experience in management, eLearning and serving distance education students. Given that the areas of responsibility in my UK position (eLearning and librarianship) are the same as my prior position in Australia, there is a great deal of commonality. In nearly two years in my new post I have not seen a new professional problem. We are all dealing with similar professional and managerial issues: how to bring about cultural change amongst academic staff to use eLearning technologies and publish their research to digital repositories; how to maximise access to the myriad of digital resources that libraries subscribe to; how to embed information literacy training into the curriculum; how to use building refurbishment projects to create 'learning commons' to make access to help easier for students; what policies and safeguards do we need to put in place if we establish national or regional collaborative storage facilities for little used texts; how to maximise revenue and minimise costs; how to create an empowered workforce. The list could go on.

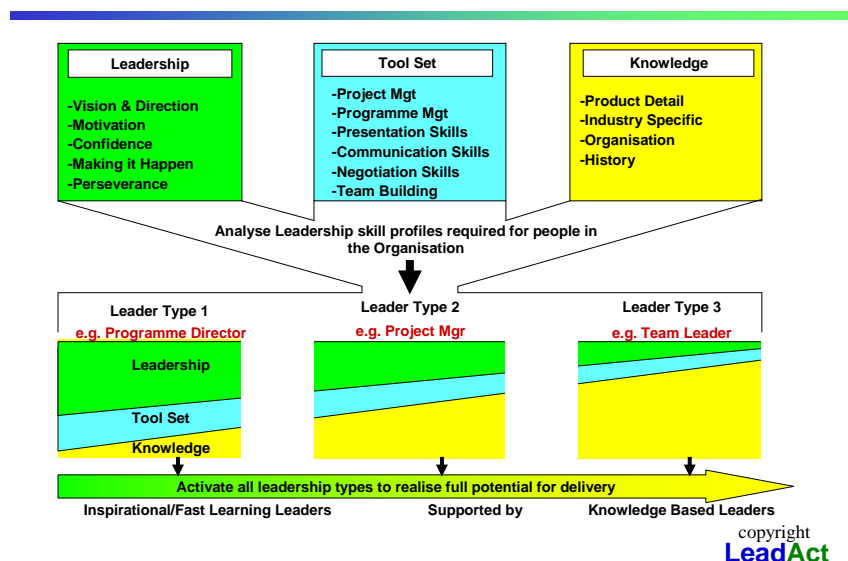
While the professional challenges are the same or very similar, the legislative and regulatory frameworks are different depending on the country where you work. For example, the laws of copyright vary, especially in relation to what can be done with digital copying. In Australia, the concept of a digital reserve/short loan collection was possible because of the Australian Copyright Amendment (Digital Agenda) Act 2000. In the United Kingdom, it was not until 2005, with the advent

of the Higher Education Trial Photocopying and Scanning Licence ¹ that it was possible to digitise 3rd party copyright works and then only for delivery to those students enrolled in the particular subject for which that digital reading applies. There are variations in equal opportunity, disability discrimination, freedom of information and data protection provisions, for instance, that a senior manager needs to come to grips with quickly, to be competent. However, the very fact that a senior manager is aware of the existence of such legislation is a good start, as you can seek expert advice from colleagues about interpretations and understandings.

Before I move away from librarian versus leader/manager, I want to point out that many private enterprises employ chief executives who do not have a background in the industry/profession that they lead. For example, Sam Walsh, Chief Executive of mining giant Rio Tinto had over 20 years experience in the automotive industry before moving to mining (Thomsen-Moore, 2005). Terry Davis, the Australian Managing Director of Coca-Cola Amatil has a background in the wine business (Jones, 2004). It is their leadership and management skills that are important, not their professional expertise.

Robert Ellis, principal of the UK consultancy LeadAct, highlights the fact that all positions have a combination of leadership, tool set (specific skills) and knowledge. At the senior level, leadership (which Ellis defines as Vision and Direction, Motivate, Confidence, Making it happen, and Perseverance) is by far the most important attribute of senior managers. The need for the tool set (project management, programme management, presentation skills, communication skills, negotiation skills, team building) and Knowledge (product detail, industry specific, organisation, history) are required to a much lesser degree the more senior a position is. These tool sets and knowledge are provided by others within the organisation, and so it is in librarianship. I know that I have lost my reference and cataloguing expertise years ago and, although I could update my skills and knowledge quickly, it is my leadership and management skills that I feel are my 'selling points'. I write 'manager' as my job description when asked to complete official forms, rather than 'librarian'.

Leadership Profiles



My contention is that the real challenges to an expatriate senior manager lie in working within the cultural differences and national stereotypes, understanding the organisational environment and, importantly, understanding yourself and how your behaviours and attitudes can influence those around you. As a senior member of the university staff, my role as a leader and manager are influenced by all these factors.

CULTURAL DIFFERENCES

Whether the senior manager is the expatriate working in a new country or simply working with a diverse workforce, managing cultural differences is a key skill. Konopaske and Ivancevich (2004) write "As globalisation continues, there will be an increased need for managers and leaders who can be effective, sensitive, and flexible in working with employees from diverse backgrounds, having an array of needs, expressing various workplace values, and possessing many different skill levels." According to Hoecklin (1995) "mismanaging cultural differences can render otherwise successful managers and organisations ineffective and frustrated when working across cultures". Therefore, it is important to be aware of cultural differences, however slight.

How culturally different am I to my colleagues at Nottingham Trent University? Javidan, Stahl, Brodbeck and Wilderom (2005) have grouped countries by cultural clusters with 'Anglo Europe' (Ireland and Great Britain) and 'Anglo other countries' (Australia, Canada (English speaking part), USA and New Zealand) as separate clusters. Hofstede (1983) groups Australia and Great Britain together with Canada, New Zealand, USA and Ireland. Hofstede's research indicates that Australia and Great Britain have almost identical cultural values. Hampden-Turner and Trompenaars (2000) add further evidence of cultural similarities stating that Great Britain identifies with its former English-speaking white colonies: Australia, Canada and the United States. Below the surface, though, it is possible to differentiate some significant differences between cultures, for example: the USA would be considered more capitalist than the other countries. Tayeb (2005) indicates that there are even different cultural characteristics between England, Scotland, Wales and Northern Ireland that comprise the United Kingdom, as well as common values and institutions that create a national culture. It could be presumed that there are no significant cultural differences for an Australian manager working in the United Kingdom although there will be some regional differences to be aware of.

The challenge I faced in moving from Australia to the United Kingdom, in some ways, is really no different to the challenges any senior manager is likely to face in a large organisation with a diverse, multi-national workforce. The *expatriate* manager is more likely to be one of the minority groups in the workforce, as in my case at Nottingham Trent University where I now work. However, my appointment can be linked to a deliberate strategy in the Nottingham Trent University [Strategic Plan 2004-2006](#) to internationalise its workforce.² The University is not unusual in seeking to internationalise its workforce (and curriculum) as universities and organisations acknowledge "transferring knowledge across global boundaries has become an important competitive advantage for organisations seeking success in the global economy of the 21st century" (Fink and Holden, 2005). My new employer made it clear from the outset that I was expected to contribute my Australian experience and knowledge of international developments to my new organisational unit.

Although the above comments would indicate few obstacles to a successful transition from Australia to the UK, it is not that straightforward. Fink and Holden (2005) provide a clue to the issues faced by any expatriate senior manager who

is expected to bring past experience and practices to a new appointment: "to impose exclusively the good practices of headquarters is tantamount to renouncing local or regional knowledge". If I substitute "headquarters" with "Australia" or my previous university employer, you can see the dilemma. I need to use my past experience and knowledge to work with my new team to increase the value of Libraries and Learning Resources (LLR), the division for which I am responsible, without staff feeling like I was trying to create an Australian outpost in Nottingham.

ORGANISATIONAL ENVIRONMENT

In October 2003, Nottingham Trent University appointed a new Vice-Chancellor and embarked on re-writing its strategic plan and undertook a significant restructure of its academic departments, moving from nine Faculties to four Colleges and ten Schools. It was, therefore, incumbent on LLR to realign its structure to support these new academic arrangements and this was one of the first issues I faced when I commenced work there in August 2004.

My strategy was to involve key staff in defining the directions and structures that were required to enable LLR to help fulfil the aims and objectives of the University's strategic plan. To that end we held a number of events that could inform decision-making:

- In October 2004, there was an initial planning session with LLR Heads where we agreed on the need for an overall restructure to create three new business units. We reached a rapid consensus and the two most senior LLR staff were designated as heads (now Deputy University Librarians) for Customer Services and Information Resources. A new manager was recruited as head of the Business Support Unit. Prior to this, there were eight staff reporting directly to the Director.
- In December 2004, a Planning Forum with key LLR managers was conducted to identify barriers to success and agree some top-level objectives for an LLR Operational Plan. Each business unit then wrote their own action plans to meet the objectives (and overcome barriers) in the Operational Plan.
- In January 2005, an LLR Customer Facing Teams Workshop was held to identify changes that were required, especially in a structural sense, to align liaison librarian functions with the new academic structure of the University.
- During February and March 2005, LLR facilitated Customer Value Research workshops, which were undertaken with academic staff and students, to identify value propositions, from a service perspective, customers' ratings of our performance against those value elements, and also the key irritations of our current services. This information was then used to inform the drafting of the following year's Operational Plan, addressing directly the needs of our customers.
- Also in March 2005, facilitated workshops on Virtual Learning Environment functionality were conducted with academic staff and students to inform the eLearning agenda that I had been given in November 2004 (in addition to responsibilities for the libraries at NTU).

LLR staff were engaged with analysis of the data from these consultations. A huge change agenda was identified. The changes we have embarked upon were not because of my appointment, but rather the response of the management team and staff to the University's new and challenging Strategic Plan 2004-2010 and information from our key customers (academic staff and students).

The creation of new business units within LLR was strategic from an operational sense, but it was also helpful by providing a significant opportunity for a 'new beginning' for everyone, not just for me. Prior to my appointment, LLR comprised many separate units, geographically dispersed over three disparate campuses and two locations on the city campus, which had operated somewhat independently. The term 'silo' was frequently mentioned at the planning sessions, as was the need to eliminate them. The planning workshops did not focus just on structural issues. We drafted two very important statements that were, in part, to help facilitate a sense of one LLR, rather than a set of separate work groups.

Enhancing lifelong learning, teaching and research through information resources and services became LLR's Purpose Statement, and was developed through a series of workshops with LLR staff during 2004-2005, building on work completed at the Planning Forum conducted in January 2005. We also defined a common set of LLR *Values*, again drafted at the Planning workshop and subsequently refined through workshops with staff groups. Through these simple devices, we had the glue to bring all groups together within a new structure. These actions helped to bridge the cultural diversity that existed within LLR, which had nothing to do with diverse ethnicities, but rather the culture of the organisation at the time. Basically, we were establishing a new organisational culture through a common Purpose Statement and set of staff Values and this, it has been recognised, makes knowledge transfer easier than it would otherwise be. (Javidan, Stahl, Brodbeck and Wilderom, 2005)

To implement the change agenda, as described in our Operational Plan, we needed teamwork across the work units and campuses, as most actions had dependencies on one another. Small task groups were established to take responsibility for some of the specific actions in the Plan. Training on teamwork skills was provided to help skill development, and this teamwork training also included staff from an entirely separate division, the IT department, as almost every new LLR initiative had an IT dimension. With this simple initiative, we were effectively building teamwork across divisions, not only within LLR.

Other initiatives were established: A Director's Team meeting was held every Monday morning to make sure all Heads were aware of issues and activities of the other Units; all Heads produce a monthly report, with progress against operational plan initiatives, cascading upwards their managers' reports; a monthly Managers Forum was established, bringing together for the first time all managers across LLR to participate in debate and information sharing and networking; an internal monthly newsletter, *LLR Link*, was established to promote both work-related and social news to all staff. All these activities helped to bring LLR together. I didn't feel like an expatriate leader, but a facilitator of a new organisation made up of bit of the old organisation and some new.

You could be excused for thinking that everything went like clockwork. It never does and there have been challenges with implementing this massive agenda. However, two events helped a great deal towards making us more effective as a work unit. LLR expanded with the creation of a fourth unit, the Educational Development Unit, which was established in October 2005 to implement the eLearning agenda of the University. Because a new Head was joining the Director's Team, we took the opportunity to undertake some targeted teambuilding for this group, to help us understand our personal styles and to celebrate diversity rather than focus on the differences. This has proved to be remarkably successful, resulting in a greater sense of togetherness, teamwork and acceptance of differences. The second event was the 2006 Planning Forum where the Pro Vice-Chancellor (Academic and Research), a long serving NTU employee, explained to the team why the University had to change, and change

so rapidly. For me, it put the organisational culture that I had inherited within LLR and NTU into perspective, and gave added legitimacy to the change agenda we had embarked upon together. I could not have said the things that were said, as I did not have the local history. It was clear that change was necessary because of the market place and the state of NTU, not because there was a new director of LLR. The Planning Forum also gave the opportunity to say that the past WAS valued, although we had to be different to be successful in the global world of higher education. At that Planning Forum, participants described LLR as it was then (January 2006) and described what they wanted LLR to be like in three years time. The next Operational Plan will include actions to help create that new LLR.

PERSONALITY OR NATIONALITY?

I have included 'national stereotypes' deliberately as I am aware of perceptions that all Australians are 'can do' type people, that we like change, and just 'get on with it'. While this is not necessarily true for every individual Australian, it is a description that I would identify with.

As part of LLR's senior management Team teambuilding activities, we all undertook the Margerison and McCann Team Management Profile (2005), an inventory tool for assessing how you prefer to work and interact at work. Margerison and McCann say "It is a common mistake to blame problems within cross-cultural teams on different national characteristics. However, misunderstandings are more often due to differences in the way people approach work, regardless of nationality." In the terms of the Margerison and McCann Team Management Profile, I am a 'Thruster-Organiser'. From my personal profile, Thruster-Organisers "are leaders of the way, not followers...who make things happen by organising people and resources so ideas, discussions, and experiments are turned into action.... and will set objectives and take action. The Thruster-Organiser's motto is 'let's do it now and get it finished'." I think these are accurate descriptions of me. So do I perform the way I do because of my 'thruster-organiser' preferences, or because I am a 'can-do' Australian, the national stereotype? At Nottingham Trent, others often explain my style in terms of my nationality, but that is clearly not the only explanation. I may be an expatriate director but I am also an individual with my own personality, experiences, and emotions.

I am aware that there are differences between myself and my experiences and others with whom I interact. Some of these can perhaps be explained because of my Australian background. For example, we speak the same language but have different terminology and accent. Australians, by and large, have less regard for the status of people than is perhaps the case within English society whose origins are based on hierarchies and classes. I am more inclined to want opinions and recommendations from those who can make contributions, rather than rely on the fact that I can impose my views because I am the boss. I do like to get things done, rather than talk about things. I suspect that these traits could be equally attributed to my personality and management style rather than because I am Australian.

Being aware of my personal styles, whether it is the Myers-Briggs personality preferences, or Margerison and McCann Team Management Profile, or the Boyatzis, Goleman & Hay Group Emotional Competence Inventory, helps me adapt to the situations in which I find myself. This skill is especially helpful when dealing with cultural differences, but it is a skill required of any manager regardless of where they work because, as mentioned elsewhere, the workforce is becoming more diverse.

EXPATRIATE DILEMMAS

In many circumstances, a decision to become an expatriate involves more than just the individual relocating. Therefore, I shall provide some background and personal experiences in which to frame my relocation.

For expatriate families, where two careers require consideration, the decision to move countries can be problematic. Hardill and MacDonald (1998) provide case studies, from the perspective of the women involved, and identified significant problems of relocations to another country. Few instances were recorded of where the woman was the lead in the relocation and they cited the inability of the female partner to get a job at all, or at an appropriate level given the person's professional qualifications. They also cited problems when the couple returned to the home country, highlighting difficulties in re-starting the career again due to breaks in service and the need to update skills from when they left. They also mentioned personal and financial problems that developed because of the career problems.

My personal circumstances were such that moving to another country was a possibility: my husband wanted to retire and undertake voluntary work (which can be done anywhere) and our sons were adult age (although two were still at university when we made our decision) and looked forward to the potential of trips to foreign lands to visit parents. Thus I did not have to contemplate the issues of accommodating dual careers.

There are other considerations that must be addressed if the relocation to a senior post is going to be successful. The challenges of settling into a new position, let alone one in a new country, are sufficient without having to deal with a myriad of personal and family problems. Good planning was required to sort day-to-day issues, which required consideration in two countries: managing financial affairs and appropriate tax arrangements, consideration of pensions and superannuation, wills in each country if you own real estate in both, establishing new social networks while maintaining the old networks in the home country, gaining access to appropriate medical and dental services, and the list could go on. My employer in the UK was very supportive with the relocation assistance it provided, and this ensured a smooth start in my new country.

The biggest problems in moving country, in my experience, were leaving aged parents and pets. Where possible, negotiate to have regular 'home travel' as part of your package so that you can regularly touch base. 'Mateship' is a common characteristic attributed to Australians. Leaving Australia and the close friends and special working relationships that develop was a wrench. However, with the wonders of modern technology it is very easy to keep in contact with family and friends. In an emergency, we are only a day away! I am also trying to develop that sense of mateship amongst my new friends and colleagues, for example by organising an Australia Day party after work on 26 January, something that I would not have done if I were still residing in Australia.

CONCLUSIONS

Fink and Holden (2005) highlight that: transfer of management know-how from any cultural base is seldom straightforward; transfer of management knowledge takes time; and transfer of management know-how is heavily dependant on how the values, attitudes, competences, and personality traits enmesh with each other. They go on to say that finding the appropriate people can be difficult but vital to manage cross cultural issues. Sparrow, Brewster and Harris (2004)

highlight the low numbers of female expatriates but provide evidence that 'women may well be suited to the needs of international management because of their interpersonal skills.' I would like to think so.

My experiences lend evidence to Fink and Holden's conclusions. Moving to any new job is complex; add to that cultural differences and the challenges increase. However, on reflection, many of the issues are the same with starting any new senior position. Personal credibility is a plus, and I discovered that my new team had done their research on my background, so that when I commenced work I had already a degree of professional standing on which to build. I was also fortunate that Australia enjoys a high reputation in my two areas of expertise, librarianship and eLearning, with two UK professional associations hosting recent study tours to Australian universities, both visiting my previous place of employment, Deakin University. The Society of College, National and University Libraries (SCONUL) visited Australia in 2005, and the Association of Learning Technologists published a report of its 2002 visit, "Keeping up with our neighbours: ICT developments in Australian higher education" (Boezerooy, 2003). Since arriving in the UK in mid 2004, I have been invited to speak to a number of conferences and workshops, sometimes being explicitly asked to compare and contrast my Australian and UK experiences. This has to be handled very diplomatically!

Coming back to the original question about whether we retain or lose market value by moving countries, I believe that I am making a valuable contribution at Nottingham Trent University, though this is for others to judge. Feedback is largely positive, although it is not possible to please everyone all the time, and with such a change agenda, it is impossible not to cause some ripples. Before I made the decision to move countries, I had taken advice from a human resource recruitment expert, and the feedback I gained was in direct contrast to Hardill and MacDonald's findings in relation to problems of moving back to my home country. Rather than finding it difficult to find employment on my return (assuming I do return), I was advised that I was potentially 'even more employable' because of the experience of working overseas and by demonstrating my flexibility and capacity to take risks, both of which would be seen as advantages to a prospective employer.

Australia is a nation of travellers because of geography. We have to travel if we are to go anywhere, either in our own country or overseas. Sparrow, Brewster and Harris (2004) discuss the concept of people's willingness to move internationally and provide evidence that young Australian managers and professionals, in particular, are receptive to international mobility. While I can't claim to be 'young', I was the same age when I relocated to the UK as my Australian parents when my father took an international post in Brazil. So, perhaps it was in my genes that I would become an expatriate manager.

BIBLIOGRAPHY

Boezerooy, P. (2003), Keeping up with our neighbours: ICT developments in Australian higher education, ALT/SURF Foundation of the Netherlands

Fink, G. and Holden, N. (2005), "The global transfer of management knowledge", in Academy of Management Executive: special issue, Vol.19, No.2. pp.5-8

Hampden-Turner, C.M. and Trompenaars, F. (2000), Building cross-cultural competence: how to create wealth from conflicting values, John Wiley & Sons, Chichester

Hardill, I. and MacDonald, S. (1998), "Choosing to relocate: an examination of the impact of expatriate work on dual-career households", in *Women's Studies International Forum*, Vol. 21 No.1, pp.21-29

Hay Group, (2004), *Emotional Competence Inventory (ECI) Feedback report*: Sue McKnight, Boyatzis, Goleman and Hay Group

Hoecklin, L. (1995), *Managing cultural differences: strategies for competitive advantage*, Economist Intelligence Unit (Pearson Education), Harlow, England. P.1

Hofstede, G. (2001), *Culture's consequences: comparing values, behaviours, institutions, and organisations across nations*, 2nd ed, Sage Publications, Thousand Oaks.

Hofstede, G. (1983), "National cultures in four dimensions: a research-based theory of cultural differences amongst nations", in *International Studies of Management and Organizations*, Vol. XIII, No.1-2, pp.46-74

Hofstede, G. (1994), *Uncommon sense about organizations: cases, studies and field observations*, Sage, Thousand Oaks

Javidan, M., Stahl, G.K., Brodbeck, F. and Wilderom, C.P.M. (2005), "Cross-border transfer of knowledge: cultural lessons from Project GLOBE", in *Academy of Management Executive: special issue*, Vol.19, No.2. pp.59-76

Jones, R. (2004), "Flavour of the month: Terry Davis and the need for change", in *Management Today*, Nov/Dec 2004. pp.7-11

Konopaske, R. and Ivancevich, J. (2004), *Global management and organisational behaviour*, 1st edition, McGraw Hill, Boston. p.v.

Margerison, C. and McCann, D. (2005), *Team Management Profile: questions and answers*, TMS Development International Ltd, York, England

Quenk, N.L. and Kummerow, J.M. (2002), *MBTI step II: expanded interpretive report*: Susan McKnight, Consulting Psychologists Press, Inc., Palo Alto.

Sparrow, P. Brewster, C. and Harris, H. (2004), *Globalizing Human Resource Management*, Routledge, London. pp. 134-141

Tayeb, M.H. (2005), *International Human resource management: a multinational company perspective*, Oxford University Press, Oxford

Thomsen-Moore, L. (2005), "Mining Magnate", in *Management Today*, Nov/Dec 2005. pp. 6-7

¹ http://www.cla.co.uk/support/he/HE_TrialPhotocopyingandScanningLicence.pdf (accessed 14 June 2006)

² http://www.ntu.ac.uk/about_ntu/strategic_plan/12910.pdf (accessed 16 June 2006)