DEVELOPING A 'ROAD-MAP' TO FACILITATE EMPLOYERS' ROLE IN ENGAGING WITH THE SKILLS DEVELOPMENT AGENDA

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The UK construction skills shortage problem remains highly topical. Despite academic research and industrial efforts to mitigate the problem, construction employers face increasing pressure to get the skilled workforce necessary to fulfil rising workloads in the UK. There is limited success in the recruitment of non-traditional labour, shift towards prefabrication and the employment of migrant labour. Following the Leitch (2006) report, employers will be expected to become more proactive in engaging with the skills development agenda in the future. Yet, the extant literature remains fairly opaque on how employers can achieve this effectively. The research project outlined in this paper attempts to examine the processes involved in engaging employers in the skills development agenda, with a view to develop a decision-support tool (a 'road-map') for employers in this respect. The proposed research approach is outlined in this paper, which includes mapping out of current policies and initiatives that are geared towards construction skills development, case studies to explore how employers are presently engaging in skills development and action research to test the prototype tool.

Keywords: decision support, employers' engagement, skills development, training.

INTRODUCTION

The UK construction skills problem is a longstanding one. There is increasing recognition of a need to raise skills levels, reflected in the political rhetoric of promoting the notion of the knowledge economy, contemporary focus on encouraging greater participation in higher education and intention to raise the school leaving age. At the same time, the industry faces growing pressure in terms of finding skilled labour that is necessary to fulfil rising workloads resulting from unprecedented public investment in healthcare, education and urban regeneration, and most notably the development of the forthcoming Olympics infrastructure. Such pressures have seen the shift towards increasing use of prefabrication and standardization, and greater dependence on immigrant labour. Following the Leitch (2006) review on the state of the UK skills challenge in the face of mounting global competition, employers will be expected to become more proactive in developing the skills of their employees.

The extant literature, however, has often criticized employers for their lack of willingness to engage with the skills development agenda. Embryonic research that seeks to examine the reasons for the lack of employer engagement is therefore reported in this paper, with a view of developing a 'road-map' to enable employers to be more forthcoming in employee skills development as aspired by Leitch (2006). The

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paper is organized in two key sections. First, a brief review of the salient points in the construction skills literature is presented. This review reveals that past research have *hitherto* placed a greater emphasis on the supply of skills, and have been relatively opaque in terms of how employers actually engage with the skills development agenda. The second section of the paper then proposes a research approach that can shed light on the processes involved in the employers' engagement with the skills development agenda.

CURRENT APPROACHES TO MEETING THE CONSTRUCTION SKILLS CHALLENGE

The problem of skills shortages in the UK construction industry is well documented (see Department for Education and Employment, 2000; Agapiou, 2002; Dainty and Edwards, 2003). Many studies have been undertaken to identify means of mitigating the situation. It is not the intention of this section to provide a comprehensive review of the construction skills literature (see e.g. Chan and Dainty, 2007). Nonetheless, the purpose of this brief review is to expose the fact that the employers' role in meeting the skills challenge has been given scant attention in the literature, which forms the basis of the research reported here. For simplicity, the current approaches to meeting the construction skills challenge will be presented in relation to the *supply* and *demand* of skills.

Tackling the supply of construction skills
Academic studies and industrial initiatives have been undertaken to consider the recruitment of skilled labour and professionals outside conventional sources, in particular women, ethnic minorities and through adult re-training (Clarke and Wall, 1998; Ellison, 2003; deGraft-Johnson *et al.*, 2003; Commission for Architecture and the Built Environment, 2005). However, Dainty and Bagilhole (2005) suggested that these have limited success, in part because the industry is structurally unprepared for non-traditional recruitment. For instance, Chan and Connolly (2006) examined the role of school careers advice on encouraging new entrants into construction and found that whilst there were girls who wanted a career in construction, advice were either not forthcoming or they were dissuaded by family members who worked within the industry. Chan and Connolly (2006) ascribed this reluctance to promote the industry to the beleaguering poor image of construction work.

The situation is also not without problems for those who eventually train and work in construction. The chief problem lies with qualifications. As Grugulis (2003) assert, "[qualifications] can help employers identify suitable employees, provide individuals with portable credentials, and give occupational groups bargaining power (p. 458)". However, employers who seek a skilled workforce often have to navigate through a plethora of qualifications available for construction. Even the National Vocational Qualifications (NVQ) system, which was intended by the UK government in the 1980s to streamline the vocational qualifications framework, has been criticized for being too vague and not contributing positively to skills development (see Callender, 1997; Agapiou, 1998). Indeed, Grugulis (2003) added, "advantages [of qualifications] stem from the skills that qualifications are assumed to certify, not from the simple fact that qualifications exist (ibid.)".

In addition to qualifications, there is also a fundamental issue with the content of training and education courses. According to Hesketh (2000), there is an age-old problem of employer dissatisfaction with the relevance of skills developed through the

training and education system (see also Learning and Skills Development Agency, 2003). An example comes from the rising interest in off-site fabrication and modern methods of construction. Whilst these provide short-term solutions to the skills shortage problem by (presumably) reducing the reliance on traditional skills, a perhaps unintended consequence is that such new ways of working requires re-thinking of the skills base and necessitates a response by training and education providers in adjusting the curriculum (see Gann and Senker, 1998; Barker, 2004). It is observed that the industry often adopts short-term solutions to skills shortages and this is not consequently matched with what training and education providers supply. Recent examples of this phenomenon can be found in the skills for sustainable communities' agenda (see Office of the Deputy Prime Minister, 2004) and the growing dependence on immigrant workers (see Fitzgerald, 2006; Dench *et al.*, 2006). In the former, the nature of what these skills really mean is currently being constructed by the Academy of Sustainable Communities; and in the latter, there is recognition of a need to consider basic language and health and safety skills for incoming migrant workers.

The increasing complexity of construction work has also impacted on the way skills are being formed through training and education. It is argued that because construction work is becoming more complex, this has resulted in increased fragmentation of what people do, and hence in the further atomization of skills required. Clarke and Winch (2004) bemoaned such atomization and called for industry and educationalists to work together to provide a holistic approach to skills development. Accordingly, such an approach would integrate theoretical knowledge with simulation and work experience so as to move towards a skills definition that accounts for the entire building process (Clarke, 1992).

Demand for skills: shift towards increasing employers' role in the skills development agenda
The UK construction industry has a long tradition of establishing employers' demand of skills through the former Construction Industry Training Board (now known as ConstructionSkills, sector skills council for construction). In the past, the CITB forecasts annual requirements of various trades and professionals at the national level (see e.g. CITB, 2003). However, this has been criticized for not considering regional differences (Dainty *et al.*, 2004) or the needs of smaller employers (Dainty *et al.*, 2005). Furthermore, such statistics that maintain traditional trade and professional boundaries do not account for the way employers adopt multi-skilling (Haas *et al.*, 2001). Even the accuracy of such statistics has come under scrutiny recently (Briscoe, 2006). As a result, ConstructionSkills have started collecting and disseminating regional information on the demand of skills, and through its regional observatories (ConstructionSkills, 2004) attempted to achieve a more accurate understanding of the nature of skills demand. Still, its efficacy remains to be established (Chan and Dainty, 2007).

We have seen that the supply of skills is complicated and fraught with problems. It is fair to say, however, that supply has been given more emphasis in the literature than demand. Delbridge *et al.* (2006), in a recent review of the UK skills challenge, surmised, "it is for example true that the supply of skills in Britain is less of an issue than it was; but this point says nothing about how those skills are in fact put to use". Indeed, the literature often appears to be critical of the way employers engage with the skills challenge. Beckingsdale and Dulaimi (1997) suggested that employers do not see skills training to be a core activity for business. Mackenzie *et al.* (2000) surveyed

major UK contractors and found that employers perceived solutions to the skills shortage problem to come from outside their remit. Forde and MacKenzie (2004) blamed the reliance on sub-contracting and growth in self-employment for employers' lacklustre approach to training investment.

These studies, however cursory, seem to paint a grim picture of the way employers detach from the skills development agenda by claiming their unwillingness in investing in training. However, skills development goes beyond training participation alone (see Ford, 1992; Paulsson and Sundin, 2000). There is recognition of the importance of skills development at the workplace (Stasz, 2001), coined in the phraseology of organizational learning (Nyhan *et al.*, 2004; Chan *et al.*, 2005).

Indeed, there are more sympathetic commentators like Raidén and Dainty (2006) who argued that employers have to juggle between employee needs for development and the competitive business environment. Raidén and Dainty (2006) suggested that construction employers operate within 'chaordic' organizations, where employers often concern themselves with planning for skills development (i.e. the orderly) whilst operating within the chaotic marketplace. Chan (2007) builds on this and argues that the literature has been opaque on how employers actually engage with skills development. Understanding this through the recruitment, development and deployment practices of employers, Chan (2007) maintains, is crucial in ensuring a sustainable construction skills base.

This is especially timely given the Leitch (2006) review, which *inter alia* recommended for:

- Shift towards demand-led skills provision;

- Raising the game from Level 2 to Level 3 provision;

- Rethinking the provision of intermediate skills;

- Targeted efforts on workless people, and;

- Statutory entitlement to workplace training by 2010.

These recommendations would place greater onus on employers to contribute to the skills development agenda. However, because little is currently known as to how employers can achieve this, the research seeks to examine the processes involved in encouraging and enabling employers to engage with the skills development agenda. Arguably, as in the case of qualifications, there is a minefield of skills-related policies and initiatives that can often pose as a hindrance to employers. Furthermore, skills development activities can increase the administrative burden on employers, especially in relation to funding arrangements (Clarke and Wall, 1998). Hence, the key research deliverable is a 'road-map' that should link the supply and demand of skills, which would provide greater clarity to employers on what is available in terms of skills development opportunities and facilitate their decision-making process when developing their skills base. The next section will elaborate on the key research questions and provide an outline of the proposed methodology.

RESEARCH QUESTIONS AND PROPOSED METHODOLOGY

The research is collaboratively funded by the UK's Engineering and Physical Sciences Research Council (EPSRC) and the Northeast Chamber of Commerce. The focus will cover mainly the construction and manufacturing sectors in the Northeast of England. The choice of this emphasis is due to a number of reasons. First, it is necessary to set

the geographic and sectoral boundaries for manageability. Second, the construction and manufacturing sectors both require a mix of vocational and professional skills, and so would be useful to explore the employers' role in skills development; yet, the two sectors are sufficiently distinct (i.e. construction being less stable and more project-based) for the research team to make meaningful comparisons. Third, the Northeast of England would make a significant, if manageable geographic area for analysis as it represents an important microcosm of the UK. According to Leitch (2006), the Northeast of England consistently under-performs the other regions in the UK.

The fundamental research questions that will enable the research team to examine the processes in relation to employers' engagement with the skills development agenda are as follows:

- What skills development opportunities are available for employers to tap into?

- What do employers consider skills development to involve?

- What encourages/inhibits construction employers in engaging with the skills development agenda?

- How do employers currently engage with the skills development agenda?

- What is the desired state of employer engagement with the skills development agenda?

- How do employers perceive and interact with other key stakeholders that are pertinent in the skills development agenda (e.g. government agencies, industrial bodies, trade unions, training and education providers)?

The chief assumption underpinning these questions is that the current emphasis in the literature on addressing the supply of skills has resulted in a relatively lesser focus on demand-led approaches to skills development, which in turn creates a mismatch between skills development opportunities and employers' engagement in skills development. This is depicted in Figure 1 below. As mentioned previously, there is a plethora of skills-related policies and initiatives that employers often have to navigate through. Such policy formulation and enforcement takes place within a multitude of organizations that are not necessarily joined up. This can be confusing for employers who are arguably at the frontline in terms of implementing the skills-related policies and initiatives. This confusion makes it difficult for employers to know who to approach and what to expect when they want to engage with skills development. It is this knowledge base that this research intends to develop. Furthermore, the research seeks to shed light on how employers currently feed back into policy formulation and enforcement (hence the double arrows used in Figure 1 below). The research approach is illustrated in Figure 2 below.
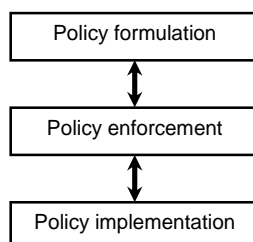

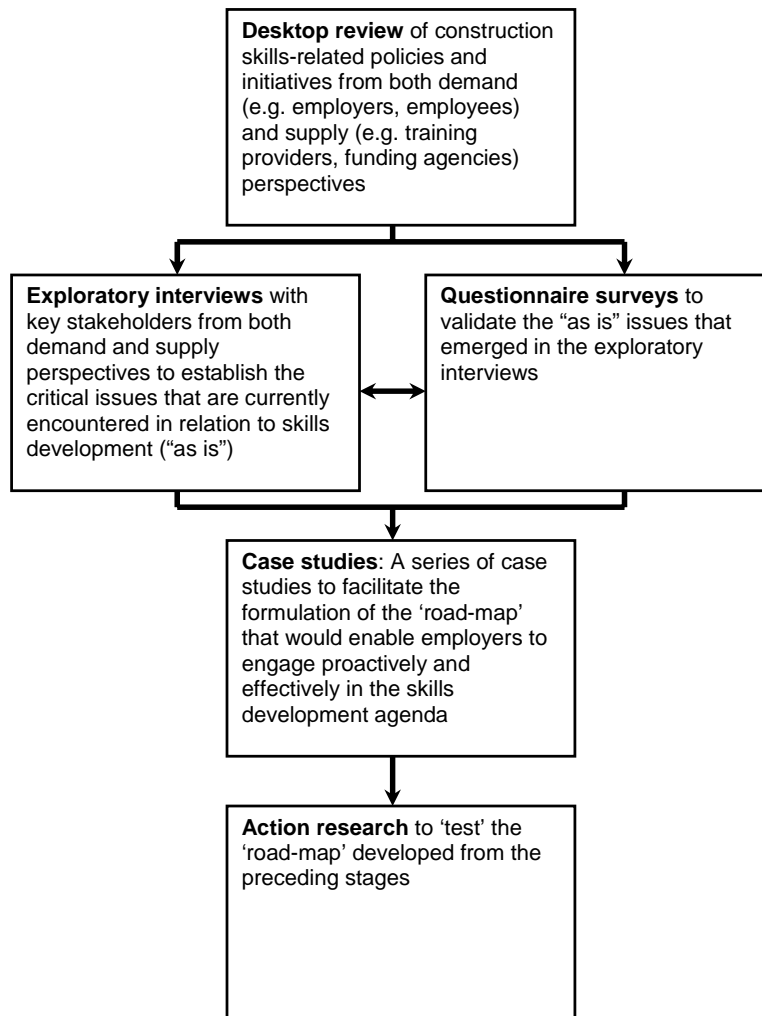**Figure 1**: Underpinning research assumption.

Figure 2: Proposed research approach.

As can be seen, the first phase comprises a desktop review of construction-skills related policies and initiatives. This will involve mapping out the key stakeholders that are involved in skills-related policy and enforcement (e.g. government bodies like Department for Education and Skills, Department of Work and Pensions, Professional Institutions, Sector Skills Council etc.), as well as those involved in implementation (including e.g. employer bodies like Construction Confederation, and training and education providers and related networks). It is expected that this is currently fuzzy and that mapping the key stakeholders would be a useful starting point to develop the 'road-map' for employers who need an understanding of what it takes to be engaged in the skills development agenda. To facilitate the stakeholder mapping exercise, a schema as shown in Table 1 below will be helpful to identify the relevant bodies that deal with both demand and supply of vocational and professional skills for both large companies and small-to-medium-sized enterprises (SMEs).

Table 1: Schema for desktop review.

Category	Demand		Supply	
	Large companies	SMEs	Vocational	Professional
Policy formulation				
Policy enforcement				
Policy implementation				

Following the identification of key stakeholders in the desktop review, exploratory interviews will be undertaken to extract the establish stakeholders' perspectives on the fundamental research questions outlined earlier. Findings from the exploratory interviews will also enable development of an early process-map of critical events that currently (as-is) take place when employers engage in skills development activities. It must be emphasized that this goes beyond traditional training and education courses to consider development activities resulting from work organization as well. The interviews will also elicit the stakeholders' perspectives of what ought to happen (i.e. the desired state). It is also anticipated that questionnaire surveys will be undertaken with members of the Northeast Chamber of Commerce to help validate the emergent findings from the exploratory interviews.

A series of case studies will then be conducted to see how the process map developed in the exploratory phase fits in real practice. The purpose of these case studies (Yin, 2002) is to elicit any differences in the employers' experience in engaging with skills development across the sectors and size of companies. Moreover, the case studies will be used to validate the findings from the exploratory interviews, and where necessary, modifications to the early process map will be made. As part of disseminating the ongoing findings on employers' engagement with skills development agenda and the myriad of skills-related policies and initiatives, the case studies will also attempt to capture good practice that can help inform the ongoing development of the 'road-map'. Because of the exploratory nature of the research, the case studies will follow a largely interpretive framework (Silverman, 2000).

The prototype 'road-map' refined from the preceding phases of exploratory interviews/surveys and case studies will be further tested in the action research (Van de Ven, 2007) phase. Lessons will be captured on the applicability of the 'road-map' so that recommendations can be made for any adjustments necessary in general implementation. It is expected that the key research deliverable of a specific 'road-map' for construction will facilitate employers in making decisions about the processes involved in engaging in skills development.

CONCLUSIONS

This paper has reported the early stage of a research project that seeks a better understanding of how employers can engage with skills development agenda more effectively. The initial review of the literature surrounding the skills shortage problem has revealed that past research have been concerned mainly with the supply side of skills, with scant attention paid on demand. Yet, there is a shift, at least at the political rhetoric level, towards more demand-led skills development. This research is aimed at developing the knowledge base that can support employers in making decisions in the process of engaging with the skills development agenda. The research is in its embryonic phase and although no results can be presented here – these have been planned for future publication – the proposed research approach has been outlined. This comprises a desktop review synthesizing skills-related policies and initiatives that already exist, a series of exploratory interviews/surveys and case studies to facilitate the development of a 'road-map' for employers, and culminating with action research to test the feasibility of the 'road-map'.

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