

Learning laboratory Projects: Deliver sustainable community through improving the skills of built environment professionals

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ABSTRACT: Generic skills deficiencies in the built environment professions have been recognised recently by government, professional bodies and employers in the UK, which has jeopardised the delivery of sustainable urban regeneration enshrined in the 'new urban agenda'. Consequently a wide variety of initiatives have been launched national wide in searching for potential solutions to address the issue. These include the establishment of Academy for Sustainable Communities (ASC) and its pilot project to set up 'Learning laboratory' in each English region. This paper discourses the background of Learning laboratory Projects and one ongoing case in South East England. It draws on the preliminary work of a consultancy team in the University of Greenwich involving these projects.

Keywords: generic skills, sustainable community, built environment profession

1. INTRODUCTION

There has been a wide debate in recent years regarding skills shortages in certain key professions working in the field of environmental sustainable development and community regeneration in the UK. This shortage is reflected in two aspects. Firstly there are severe shortages in the number of practitioners entering Key built environment professions, and secondly there are deficiencies in the skills of those charged with delivering sustainable communities and promoting urban regeneration in the front line [1] [2] [3].

A range of reports have been released by government commissioners and individual academe to both define deficiencies and identify potential solutions in the form of strategies to improve generic professional competence and capacity building. These strategies basically concentrate on a number of ways in tackling the problem. One is calling for a reform to the current education system. This includes to raise the profile of core occupations to young people and those seeking a career change, to develop more practice-based (rather than theory-based) curriculum and training settings, and to introduce more effective procedure for professional accreditation [4] [5].

Another main category aims to improve the skills and knowledge of individuals with a current practitioner or decision-making remit through regular CPD programmes, organisational learning initiatives and a wide resource sharing and stakeholder engagement [6] [7] Others have suggested the establishment of occupational benchmark for skills audit, cross-sector working mechanism between partners, and upskilling the wider public sector (rather than built environment professions alone) to enable

sustainable communities can be delivered in a holistic manner [8] [9] [10].

Following the Egan Review of skills (2004) in England and similar work commissioned by Communities Scotland, a national organisation, the *Academy for Sustainable Communities* (ASC), was launched in 2005 to highlight the need for a national system of training and skills development for community regeneration. Part of ASC's work programme includes establishing pilot '*Learning Laboratories*' in each English region with the objectives to understand practitioner skills availability and deficits in local region, to increase professional skills level and build capacity and to develop a detailed understanding of what changes behaviour and increases competency. All these will help authorities at central, regional and local level to plan and fund appropriate actions to address current skills deficit jeopardising the implementation of the 'new urban agenda'.

At time of writing, several Learning Laboratory projects are being spearheaded by *Urban Renaissance Institute* (URI) at the University of Greenwich. This paper sheds light on the background of these projects and introduces a particular case taking place at Ashford in Kent. A brief summary is given based on preliminary findings and its implications to built environment professions in coping with the community regeneration challenge.

2. DEFINING THE SKILLS DEFICIT FOR BUILT ENVIRONMENT PROFESSIONS

The period since the 1990s has been one of rapid change in the UK in all aspects of policy and delivery in relation to the development of the built

environment. This change took place as the result of the confluence of several factors. In the economic dimension, the shift from a production to consumption based economy in the Western Society and increased process of economic globalisation require British cities and towns to be re-imaged visually and regenerated physically to meet the development needs of the new century. In environmental terms, the concept of *sustainable development* has gradually prevailed and affected town and regional planning mainstream to protect the ecosystem and reduce the consumption of natural resources through innovative spatial organisation. These pressing challenges pose new requirements on built environment professionals.

In social and institutional terms, the Post World War II planning system set in the *Town and Country Planning ACT 1947* has received some major changes with the promulgation of the *Town and Country Planning ACT 1990* and further through the *Planning and Compulsory Purchase ACT 2004*. According to the new act, the *structure plans* (by county council) and *local plans* (by district council) in the old system are replaced by *Regional Spatial Strategy* (RSS) and *Local Development Frameworks* (LDFs), both of which are made of a wide range of documents to outline the targets and planned actions for the development within each district over a three year period. In addition local authorities are also now required to produce more detailed *Local Development Schemes* (LDS) and *Statement of Community Involvement* (SCI). All schemes have to be accompanied by a *Sustainable Appraisal* (SA) and a *Strategic Environmental Assessment* (SEA), which have been required under the EU laws. Though the aim of the new planning system was to simplify and fast-track the production of development plans, the increase in the number and type of documents an authority is required to produce would imply that the real effects may not be the case.

As a result of all above factors, the professions engaged in urban development have undergone a period of expansion since the 1990s both in numbers and in the demands placed on them to deliver increasingly complex, joined-up strategies [11]. Today a traditional physical, design-led solution that planning practitioners have been familiar with is no longer enough to steer the urban development in a 'sustainable' sense. 'Sustainable community' self-suggests a fully integrated economic, social and environmental approach to urban and rural living, which is such a broad theme deliberately envisaged to embrace a wide variety of occupations engaged in the creation and maintenance of a durable and high quality of life. The changing rationale and operational procedure of the built environment domain mean that new field have opened up to which no one existing profession can lay claim, so that partnership working becomes the usual delivery vehicle and multidisciplinary teams in both public and private sectors are now the norm [12].

In response to the skills obsolescence in the built environment profession and search for possible solutions, the Labour Government has appointed a range of commissions to investigate this subject. In 1999 the *Urban Task Force* was set up under the

leadership of architect Richard Rogers to prepare a set of strategic objectives for the 'new urban agenda', which led to the publication of the influential report *Towards an Urban renaissance* [13]. From this arose a series of White Papers and policy circulars. It also led to the establishment of the network for *Regional Centres of Excellence* (RCEs) to promote regional innovation and good practice, coordinate urban development training and encourage community involvement in the regeneration process.

As the Rogers report had been criticised for over accentuating environmental and design-led issues, more initiatives were lunched to focus on integrating social and economic concerns of community regeneration. In 2000 a series of interdepartmental Policy Action Teams (PATs) were set up under the aegis of the Social Exclusion Unit to explore a national strategy for neighbourhood renewal. PAT 16 took an interdisciplinary approach in producing the report *Learning Lessons* which restates the knowledge and skills gap are existing in a number of regeneration agencies and restrict them to carry out their core functions well [14]. In 2002 the Neighbourhood Renewal Unit (NRU) were established within the Office of Deputy Prime Minister (ODPM) and published a proposed knowledge and skills strategy as *The Learning Curve* [15]. At about the same time Sir John Egan, president of the Confederation of British Industry, was invited to map out systematically the skills requirements for those professions directly and indirectly involved in the delivery of the sustainable community agenda. The outcome is known as Egan Review of skills [16]. The generic skills identified in these reports are summarised in Table 1.

All these reports reach a broad consensus that community regeneration requires a comprehensive and joined-up approach to policy implementation where professions need to work in multi-disciplinary conditions. The current problems have been identified in a number of critical aspects. Firstly, higher education "*may give too academic an emphasis, divorced from the real world*" [17]. Secondly, many professionals "*are almost over-trained, over-professionalised and departmentalised*" in their own narrow field but at the same time lack cross-professional competence [18]. The Rogers Report points out that "*only 3-4% of the graduates entering relevant urban professions each year will have undertaken hard-edged multi-disciplinary study*" [19]. These two points mean that current course design in educational establishment to train built environment professions should be revised to reflect changes already evident in professional practice. They also mean that it is important for *learning* and *upskilling* behaviour to take place constantly through day-to-day work as school curriculum would be impossible to cover everything and developed as fast as the needs of the changing world. Unfortunately, in many organisations and agencies working in the built environment field there is an absence of learning environment, mechanism and strategy, and neither there are external resources for them to resort to. This is the third point where the problem lies.

Urban Task Force Report 1999, Interdisciplinary skills	PAT 16 Learning Lessons 2000, skills	NUR The Learning Curve 2002, core skills	The Egan Review 2004, generic skills
Production of design briefs Coordination of procurement methods and competitions to deliver high-quality design alternatives Proactive use of the planning system Community involvement Integration of physical development programmes with others Land assembly Land remediation Project appraisal, management and finance Provision of services and infrastructure Creating and managing effective arm's-length delivery bodies	Project management Team building, leadership, management Problem solving Finance Risk taking Listening/learning Conflict management Accessing knowledge about 'what works' Working with communities Building skills with communities	Residents: Strategic skills Performance management Probity and stewardship Listening, negotiation, consensus building Conflict resolution Confidence Analytical, interpersonal and organisational skills Professionals/practitioners: Analysing possibilities Strategic leadership Management of people Valuing diversity Working with partners Working with the community Communication Conflict resolution Project management Finance and budgeting Research, monitoring, evaluation Risk assessment and management Mainstreaming IT skills Civil servants/policy makers: Analytical skills Ideas leadership Communication Networking, coordinating Influencing, negotiation, brokering Consensus building Partnership working	Inclusive visioning Project management Leadership Thinking/brokering Team/partnership working Making it happen Process/change management Financial management and appraisal Stakeholder management Analysis, decision making, learning from mistakes, evaluation Communication Conflict resolution Customer awareness

Table 1 generic skills required for built environment professionals (sources: adapted from Rogers, 1999; NRU, 2002; PAT 16, 2000 and Egan, 2004)

3. ASHFORD'S FUTURE: LEARNING LABORATORY PROJECT IN KENT

Ashford stands strategically at the centre of South East England and has been a regional communication hub for a long time linking London and European mainland through M20 motorway and Channel Tunnel Rail Lines. It has for sometime been identified as a priority for investment and potential growth areas in RPG9 and other structure and local plans. The *Great Ashford Development Framework*, produced by English partnerships in 2001, has set out a 30-year target to make Ashford a successful and sustainable town: by 2031, Ashford is to have grown to accommodate 31,000 additional homes and 28,000 additional jobs doubling the size of the town with the highest standards of design and innovation. Ashford's Future, a governmental partnership, has therefore

been established to ensure that the long-term plan is met and delivered over the steps.

Ashford growth area is of a scale and complexity which makes it ideally suited to be a pilot study subject in demonstrating Learning Laboratory initiative in the South East England. South East England Development Agency (SEEDA) successfully secured fund from ASC and invited URI team from the University of Greenwich to carry out a skills audit as the first stage of this Learning Laboratory project. The main objectives is to understand skills availability and deficits of Ashford's Future's delivery body, to identify ways that improves generic and professional skills level among partners and to develop a detailed understanding of what impacts upon learning behaviour and competency enhancement within a multi-disciplinary organisation.

Ashford's Future is a structural organisation representing a strong public and private partnership

involving all the key agencies (regional and local council, EP, SEEDA, the housing corporation etc.) The bottom hierarchy of the structure is composed by nine work management groups (WMG) dealing with a wide range of projects from development strategy to community engagement. Each group has 20 to 30 members representing all the partner organisations involved and meeting regularly to champion and coordinate the area of work for which they are responsible. Daily communication and management activities in Ashford's Future however are carried out by a small 'core team' with five full time staff who are supported by the WMGs and overseen by the highest level of the structure, the delivery board. As the delivery board only exists once a month and works like an assembly to monitor the overall progress set out by the development agenda, the core team and the lead officers for each work management group are actual decision makers in this delivery vehicle and front-line enablers to implement specific tasks. They are the clients of this skills audit.

Four main methods were employed to gather information in this study: face-to-face stakeholder interviews, focus group workshop, a short on-line questionnaire and telephone interviews. Though each method had its own particular strengths and weakness, when the information from all four methods was put together, some interesting insights could be gleaned in a big picture of skills availability and improvement potentials for Ashford regeneration professionals. Interviews were carried out using a semi-structured questionnaire. Their purpose is to raise understanding of roles, powers, structure and working mechanism of the delivery vehicle, as well as perceptions, skills capacity and performances of important individuals made up of the body. In due course the DELPHI technique has been used to collect rich data and obtain reliable consensus of group members' opinion on selected issues.

4. Preliminary findings of the Ashford's Future learning Lab Project

As the whole project has not been completed so far, only preliminary findings can be reported at this stage. Our first finding indicates that there is a general consensus around the meaning of regeneration and sustainable development. Most partners are well aware of the recent government policies, techniques and good practices in related field. Also there is widespread agreement on key skills that is likely to be required for work in the community regeneration context, as identified by Egan and the others.

Secondly, within the public – private partnership, local authorities, government agencies and other public bodies play several vital roles in making regeneration happen, these including strategy visioning, policy steering, relationship brokering and fundraising etc. However, there is often a lack of integrated and consistent development agenda and clear aims among different organisations, with different groups pulling in different directions. There is a need for overarching framework to coordinate and engage partners.

Thirdly, all-around skills (rather than specific skills) are more in deficit in delivery regeneration projects. 'Professional' skills like project management, master planning, financial appraisal and negotiation, and 'generic' skills such as leadership, communication, creative thinking and consensus building are the most pressing skills development needs identified in this audit. However these skills are most often developed through experiences rather than initial education or training. In our interviews there is a general consensus that training provides a baseline covering most technical aspects of the job, but the most interpersonal and management skills must be honed, practised and enhanced by working in a variety of projects.

"Consultation, negotiating and working with multi-disciplinary teams are all learned on the job, and to be honest it is difficult to see how else this would be done."(interviewee)

Therefore the forth point is, to create an effective learning environment and mechanism to employees through their day-to-day work is important and should not be left to chance. 'Learning through doing' and 'learning by observing others' require well-supported and properly constructed methods, for which mentoring scheme, experience networking, regular symposium, staff exchange scheme and promoting cross-sector collaboration are a few examples of potential initiatives.

Finally we also found that most practitioners believe the prevailing form of Continuing Professional Development (CPD) programme made up of day (or a-few-day) course is not useful. Past experiences suggest that effective training is likely to take place when people are 'off' from their familiar environment in terms of timescale and procedure so that old behaviour and perceptions may be changed. There is a plea to design more pertinent, viable and accredited training curriculum for the development of generic regeneration skills for local authority staff, and to run it as a medium or long-term mechanism. To this respect local and regional education establishments (particularly colleges and universities) should take the burden and play active roles (for instance, organise summer school, night class, distance learning, study trips etc). In addition, skills audit should be carried out on a regular basis to identify new professional development needs and gaps within the organisation.

5. Conclusion

Community regeneration, with its emphasis on understanding, and engaging with local needs and contexts, is a relatively recent development requiring much stronger partnership working and highly skilled delivery force to make it happen. This, in itself, creates complexity and an inherently messy and confusing condition. The ever changing inputs in social, environmental, economic, and legislative terms present the built environment professions with new challenges of connecting their past experiences, knowledge and skills with new urban agenda, and requiring them to apply and extend their longstanding

expertise into new area of work. Skill shortages in cross-sector, interdisciplinary dimension has been well recognised and deserves more research and intervention from the policy makers.

There are many ways to tackle the current skills obsolescence in the built environment professions. To reform the course settings in higher education, enlarge professional recruitment, benchmark against skills level of front-line practitioners and develop more effective CPD programme are all possible solutions. The creation of 'learning environment' within the organisations involved in community regeneration is imperative to enable employees develop new skills on the job and make this happen faster than would otherwise be the case. In this regard learning laboratory projects will help to develop understanding of learning mechanism and behaviour, and identify appropriate learning form and models for the built environment professionals.

At the time of writing, the URI team is concurrently undertaking several other learning laboratory projects in the region. 'Inspire East' is an initiative collaborated with EEDA (East England Development Agency) to design and deliver training programme for partners working on Fryerns / Crayland regeneration project in Basildon. 'Addressing barrier to delivery' and 'Developing Generic Regeneration Skills' are two projects with similar content and timescale collaborated with Thames Gateway and South Essex county authorities. It is believed that these learning laboratory approaches will contribute towards community regeneration and sustainable development in the South East England to a great deal.

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