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Has BEPE – the Built Environment Professional Education Project – been Effective at Changing Inclusive Design Education in the UK?

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Abstract

The Government’s Paralympic Legacy Project - the Built Environment Professional Education Project - nudged the key built environment professional institutions into a journey that is starting to change how inclusive design is taught to built environment students.

Many institutions, including the Royal Institute of British Architects, the Royal Town Planning Institute, the Royal Institute of Chartered Surveyors, the Landscape Institute and the Chartered Institute of Building are now embedding inclusive design into their professional standards, into their accreditation criteria and into their CPD programmes.

An increasing number of higher education institutions are now developing new inclusive design courses and programmes and many new buildings have delivered high standards of accessibility and inclusion. Are these examples still few and far between or is inclusion now business as usual in the UK?

This paper looks at the impact the BEPE Project is having and asks is this enough to change our attitude towards delivering more accessible and inclusive buildings, places and spaces or will disabled people continue to face the same challenges in accessing homes, jobs and services in the future.

What is BEPE

BEPE – the Built Environment Professional Education Project – was part of the UK Government's Olympic and Paralympic Legacy Programme following the success of the London 2012 Olympic and Paralympic Games. The Games were hailed as 'the most accessible ever' and there was a strong desire to learn from the almost unique level of inclusivity achieved in the Olympic Park and to see whether similar levels of inclusivity could be achieved in future development projects – both large and small projects.

In December 2012 the Paralympic Legacy Advisory Group was set up to advise government on how the legacy plans could ensure a lasting legacy for disabled people. The group had a membership of Paralympians, people from organisations of disabled people, leading disability charities and business. They all agreed that stimulating an increase in inclusive design would be a fitting and lasting legacy and they were keen to support a project that would help to make inclusion 'business as usual' in future construction projects. Increasing inclusive design knowledge and skills across all built environment sectors was seen as the way forward (there was little support for any regulatory or legislative change).

The need for an intervention in the education of built environment professionals – from both higher education institutions and those delivering professional development programmes - was supported by some initial (pro bono) research undertaken by McKinsey, who confirmed that, despite some good examples, inclusive design teaching was inadequate and inconsistent across the industry.

Education could change mindsets, build capabilities and drive behavioural change but it would require a systematic change in the way built environment professionals were taught. Ad hoc limited change across institutions and academic programmes by adding a few more occasional 'specialist' lectures was not going to effect the change needed - embedding the learning into existing programmes and courses so it became part of the normal way of teaching and learning was what was required.

Funding for the project was agreed by the Olympic and Paralympic Legacy Cabinet Committee and a management group of officials from across government and the Greater London Authority was set up in the autumn of 2013.

The BEPE Project Board held its first meeting in March 2014 and agreed a vision:

> ‘Every newly qualified built environment professional will have the knowledge, skills and attitude to deliver accessible and inclusive buildings, places and spaces’

This would be achieved by:

> ‘Embedding inclusive design as a core part of the required curriculum in the education of built environment professionals, with student assessments and Assessments of Professional Competence that reflect this.’[1]

The BEPE Project Vision

Every newly qualified built environment professional will have the

Attitude

Skills

Knowledge

to deliver accessible and inclusive buildings, places and spaces.

Students: learn the skills that make inclusive design second nature

Educators: Inspire your students to acquire the knowledge, skills and confidence to make inclusion the norm not the exception

Professionals: Integrate the principles of inclusive design into all your projects

Progress from 2013 - 2016

There was immediate support from the Minister for Disabled People and from key built environment professional institutions. Mark Harper, Minister of State for Disabled People (from 2014 to 2015) said:

> ‘Introducing built environment students to the concept of an inclusive environment at the beginning of their professional education and then

> embedding the principles throughout their learning will help in the long term to change attitudes towards disability.
>
> It will increase skills and knowledge in inclusive design and will produce architects, planners, surveyors and engineers of the future who will have the competence and desire to put accessibility and inclusion at the heart of their projects. This will help to make social and physical inclusion the norm in all development projects'[2]

RIBA (The Royal Institute of British Architects) were among a dozen professional institutions who provided a supportive statement shared on the government web site:

> 'The Royal Institute of British Architects feels passionately that improving accessibility for disabled people forms a critical curricular element for all those involved in studying the built environment; we are proud therefore to support this wider industry drive. We will be working to develop criteria referencing inclusive design as part of our work with all recognised RIBA schools of architecture around the world to help lead this critical aspect of the design process.'[3]

CIOB (the Chartered Institute of Building) accepted the challenge to 'take the lessons learnt and improve training and education so that the London 2012 Games does not remain a shining beacon of success but becomes the norm'.

In principle support seemed easy to obtain, but tangible changes to accreditation criteria could take some time. However, the project was given a major boost when the Quality Assurance Agency reviewed several key built environment Subject Benchmark Statements in 2014 and 2015. The QAA is the independent body that oversees standards in higher education in the UK. Their subject benchmark statements form part of the UK Quality Code for Higher Education and set out what graduates in a particular subject might reasonably be expected to know, do and understand at the end of their programme of study. They describe what can be expected of a graduate in terms of the academic standards skills and abilities needed to develop understanding or competence in a subject. The benchmark statements for Architectural Technology; Town and Country Planning; Landscape

Architecture; Land, Construction Real Estate and Surveying have all now been amended to include the following as a threshold standard:

> 'the need for graduates to have knowledge and understanding of the principles and processes that deliver an inclusive environment and to recognise the diversity of user needs by putting people (of all ages and abilities) at the heart of the process'.[4]

The British Institute of Facilities Management had already been providing members with inclusive design CPD (Continuing Professional Development) training, but quickly changed their Professional Standards Framework to introduce a separate component called 'Managing Accessibility and Inclusion'. The Royal Town Planning Institute in their Assessment of Professional Competence (APC) review in 2015 incorporated the need to understand and consider inclusive planning in two key competencies 'professionalism and code of conduct' and 'the spatial planning context'.

Following a review of the pathways to professional qualification, which define the knowledge, skills, experience and competence required to become a chartered surveyor, the Royal Institution of Chartered Surveyors (RICS) made inclusive environments mandatory at Level 1 from August 2018.[5] CIOB have also now incorporated inclusivity in their Undergraduate Education Framework (2018 Edition).[6] So systematic change is gradually being introduced by the professional institutions, but is the higher education sector starting to change the way inclusive design is taught – will it catch up with the way sustainability is accepted as an essential element of built environment professional education - and is the construction industry embracing the need to improve access and inclusion?

Transition to CIC in 2016

The government and the BEPE Board recognised that the project was going to take at least five years and probably more before any long-term impact began to emerge. So, in March 2016 following the publication of a progress report, the project was transferred to the Construction Industry Council (CIC) to help with the transition from a government driven project to an industry owned and led project. The CIC is the representative forum for the professional bodies, research organisations and

specialist business associations in the construction industry. With 35 member organisations, a reach of over 500,000 individual professionals through its collective membership and more than 25,000 firms of construction consultants, the CIC was seen as the organisation to help to disseminate the inclusive environment message.

The BEPE Board members moved to the CIC for the transitional year and published a report of progress in 2017.[7] The Board endorsed the recommendations made in the government progress report to adopt the six principles for achieving an inclusive environment and the CIC published the 'Essential Principles for Built Environment Professionals[8]. These principles aim to guide, support and motivate individual professionals when making decisions for clients, employers and society which affect the achievement of an inclusive environment. The aim was to stress that inclusive design is a professional obligation and that the goal of achieving inclusion should be integrated into an individual's professional activity. The following six principles were endorsed by 15 key built environment professional institutions:

1. Contribute to building an inclusive society now and in the future
2. Apply professional and responsible judgement and take a leadership role
3. Apply and integrate the principles of inclusive design from the outset of a project
4. Do more than just comply with legislation and codes
5. Seek multiple views to solve accessibility and inclusivity challenges
6. Acquire the skills, knowledge, understanding and confidence to make inclusion the norm not the exception

A second Essential Principles Guide was published in September 2018, to support, guide and motivate clients, developers and contractors, so that those who own and pay for development take responsibility for achieving an inclusive development process.[9]

To help stimulate and raise awareness throughout the construction industry the CIC also introduced an annual Inclusive Environment Award, a regular monthly digest and regular Inclusive Environment briefings.[10]

Building capacity in the higher education sector

The key higher education forums were appraised of the BEPE project from the beginning, with presentations given to SCHOSA (the Standing Conference of Heads of Schools of Architecture), CHOBE (the Council of Heads of the Built Environment), the Planning Forum and ACED (the Association of Civil Engineering Departments).

Recognising that capacity is an issue for many in the higher education sector and to help illustrate the key issues in terms of improving inclusive design knowledge, skills and understanding, the CIC also published a Teaching and Learning Briefing Guide in 2017. [11] 'Bringing Inclusive Design into Built Environment Education' illustrates the key issues in terms of improving knowledge, skills and understanding. It aims to support educators to take the principles of inclusive design forward, embed them into their teaching practice and help equip students with the confidence to deliver an inclusive environment in their future professional lives. Both the Minister for Disabled People and the Minister for Communities and Local Government supported the guide, commending it to all in the higher education sector and those involved in continuing professional development programmes saying:

> 'If our buildings, places and spaces are built with access needs for all in mind, disabled people can then retain their independence, contribute fully to society and the economy and live fulfilling lives – it [the guide] is another great help in raising the profile of inclusive design'.

The guide drew on the previous work of the Centre for Education on the Building Environment (CEBE) at the Higher Education Academy[12], along with some examples of good practice in teaching already taking place at many universities and colleges and by other educators in the UK. It also drew on the Design Council's Inclusive Environment Hub and on their work to develop a new on-line inclusive environment teaching resource due to be published shortly.[13]

The Teaching and Learning Briefing Guide's key messages for the education sector are that:

- All BE professionals should finish their basic training with an understanding of the impact of their professional activities on the achievement of an inclusive environment
- Training should include consideration of the impact of the built environment on the inclusion in society of disabled and older people
- Establish an inclusion related cross - professional development programme
- Bring the evidence base from research and practice into the realm of educators and policymakers

New Initiatives

I now highlight two recent higher education initiatives in inclusive design teaching practice that support the aims of the BEPE Project and that demonstrate creative ways of how inclusive design can form part of a student's learning.

Using the inclusive design process established by the Olympic Delivery Authority and implementing the Mayor of London's inclusive design policies set out in the London Plan, the London Legacy Development Corporation (LLDC) has demonstrated very effectively how to take the principles and processes of an inclusive environment forward.[14],[15] The development of the five new neighbourhoods being built in and around Queen Elizabeth Olympic Park are now a benchmark for achieving an inclusive environment.[16] The LLDC has also supported the launch of the Global Disability Innovation Hub (GDIH) at Here East (the building previously used as the press centre during the London 2012 Games). [17] One of GDIH projects is the launch in September 2019 of a new MSc course called 'Disability, Design and Innovation' led by University College London (UCL). Taught across Loughborough University London, London College of Fashion and UCL, this new course will blend design engineering with global policy and the societal context of disability and aims to give students the skills to be innovators in the field of global disability[18].

Another initiative is the Dis/Ordinary Spaces Architecture Project[19]. Co-founders Jos Boys and Zoe Partington are exploring how disability and accessibility can be done differently within architecture, interiors and related design practices:

> 'Instead of treating disabled people as mainly a 'technical' problem, to be added-on at the end of the design process, we show how starting from

> disability – from the rich differences that biodiversity and neuro-divergence bring – can be a vitally important creative critical resource. We argue that designing with diverse bodies opens up important questions about 'what is normal', providing insights about how social and spatial inequalities are perpetuated through the design of built space, and offering valuable opportunities for change.'

Videos from three case studies from Manchester School of Architecture, Westminster University and CASS School at London Metropolitan University show how artists and educators co-partnered to prototype innovative and creative projects for teaching disability and inclusion[20].

The Future

'Entrenching inclusive design isn't just about changing attitudes but teaching through education and training. Designers, architects and engineers are too often not equipped, through courses and accreditation, to understand or take into account inclusivity and the needs of all end users. Teaching the next generation of engineers to consider the impact their work has on all societal groups should be a priority to ensure progress is not lost.'[21]

There are many buildings - new and old – that demonstrate good inclusive design. Winners of the Civic Trust Awards and the CIC's Inclusive Environment Awards, and innovative solutions to inclusion such as how the lift and specialist equipment installed at the O2 in London enables disabled people to experience the climb up over the roof 'Up at the O2', are beacons of good practice.[22],[23],[24] However, we cannot assume that these examples are the norm today. The Women and Equalities Select Committee Inquiry into Disability and the Built Environment reported in 2017 that:

> 'The challenges disabled people face in accessing homes, buildings and public spaces constitutes an unacceptable diminution of quality of life and equality.'[25]

The report made several recommendations to government, to the construction industry and to professionals engaged in planning, designing, constructing and managing our built environment, particularly in the areas of housing, public buildings and the public realm. Educators, students and professionals should take note that despite 50 years of technical standards, 30 years of building regulations and over 20 years of anti-discrimination legislation we are still not managing to create an environment which enables the equal participation of disabled people – an environment where 'everyone with lived experience of disability, health condition, or impairment, can participate fully as equal citizens'[26].

The revised British Standard Code of Practice BS 8300:2018 'Design of an accessible and inclusive environment' introduced a new section on integrating inclusive design principles into the development process from the outset - from project inception through to completion and occupation.[27] It recommends the production of an Inclusive Design Strategy to help inform the developer's initial vision and the project's strategic brief and to help influence the procurement and tendering processes. This can help ensure that the principles of inclusive design are incorporated throughout the project, not just added on part way through the development process because of planning policy or building regulation requirements but is embraced and championed as a fundamental part of the project.

This does, however, require a shift in attitude, mindset and behaviours. Better enforcement of the existing legislation and regulations is of course significant in affecting change, but, we cannot be complacent about the importance of teaching, learning and practicing the principles and processes that achieve an inclusive environment and our own responsibilities as built environment professionals.

It is difficult to say how many educators are now reflecting on the importance of embedding inclusive design into their teaching practice and whether a systematic change is starting to take place in how built environment professionals are taught inclusive design. More research is needed to follow up the BEPE Project and to see whether the new initiatives starting to emerge are ad hoc and inconsistent or whether the small changes already being made by the professional institutions in their professional standards frameworks and accreditation processes will have a lasting impact. The challenge in a university sector currently experiencing significant

financial, political and other constraints, is to see whether the people validating courses and those teaching the courses can implement the necessary changes to improve our understanding our knowledge and our skills and make inclusive design business as usual in the future.

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