

## Post Occupancy Evaluation: An introduction

Mindy Hadi, BRE Sustainable Development Group SFC Event 9th July 2009



## Why POE?



## Construction is an expensive business

How do we know when we have got it right......

....or wrong?









bre





#### Focus of POE

- POE is a recognised process of providing structured feedback on project performance throughout a buildings lifecycle
- Review of the process of delivering the project up to and post handover
- Evaluation of the performance of the building in use (technical, functional, social, economic) during occupation
- Lessons learned and shared



#### Some history

- Origins in 1960s
- RIBA Plan of work 1962 included Stage M: Feedback
  - Inspection of completed buildings as 'way of improving service to future clients'
- 'POE where are you?' lan Cooper in Building Research and information 2001
- Increasing interest with development of tools and guidance



#### Adding value to FE/HE projects: Building level

- Identifying and addressing existing performance issues
- Responding to users needs
- Reference to original business objectives and addressing changing institutional needs over time
- Monitor understanding of building operators
- Providing feedback on occupant behaviour



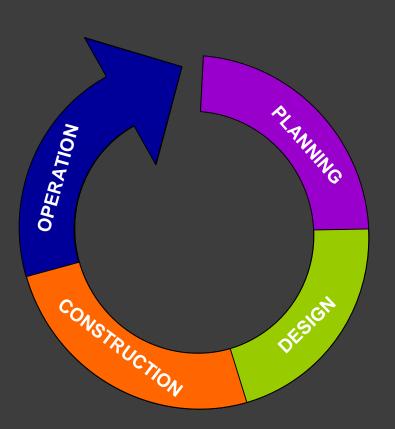
#### Adding value to FE/HE projects: Sector level

- Demonstrating the benefits conferred through improvements to the estate eg education delivery, improved efficiencies
- Learning and sharing lessons that can be used to improve the process and design on future construction projects
- Improving building procurement to provide better value for money
- Encouraging best practice
- Informing the future funding decision making process



# Virtuous circle of continuous improvement

Continuous improvement: feedback throughout a building's lifecycle





#### Links to sustainability

- 'Sustainability begins with what finding out what people need and want ..... and providing it'
- BREEAM Education credits
  - Stakeholder consultation
  - Design Quality Indicator including In-use stage (POE)
- Are 'sustainable buildings' performing any better?



## The SFC and Post Occupancy Evaluation

- POE mandatory for all SFC projects over £3 million since 2008.
- Two related projects undertaken by BRE for the SFC
- 'POE of Sustainable Development Projects' 2008-10
  - Post Occupancy Evaluations of 4 key development projects: 3 sustainable developments and 1 standard new build
  - Pilot the SFC Post Occupancy Evaluation Guidance
- 'POE of college capital projects' 2009-13
  - 11 capital projects at 9 institutions
- Training and dissemination



## Projects: Aims and objectives

- To promote POE as an essential best practice performance management and continuous improvement tool
- To identify areas of improvement and efficiency that can be measured and recorded, that can influence future decision making
- To allow lessons learned to be disseminated to enable the sector to self improve and ensure value for money
- To capture information on delivery and performance of the sustainable elements of the projects



## Methodology



- Three stages
  - Operational Review: 6-12 months post handover
  - Functional Reviews: 12-18 months post handover
  - Strategic Reviews: 3 5 years post handover
- Focus on
  - Process: Post project Review
  - Product: Building in use



#### Our approach

- SFC guidance not prescriptive methodology chosen to suit needs of project and stages
- Variety of techniques to build up an all-round picture and eliminate bias
- Independence
- Involving a wide range of stakeholders eg
  - Academic, operational and administrative staff and students
  - Consultants and contractors
  - Estates departments
- Building good relationships to ensure buy-in
- Flexibility in programme to meet needs e.g. exams, holidays
- Understanding of unique issues and sensitivities



#### **POE** techniques

- Observational walk rounds
- Financial analysis
- Energy, water and sustainability audits
- BREEAM assessments
- Design Quality Method
- Occupant consultation: Questionnaires, workshops, focus groups and interviews



#### Where we are now

#### **Operational Review**

- QMU
- Dumfries and Galloway
- North Glasgow College
- Jewel and Esk College
- Borders College, Hawick Campus





#### Functional Performance Review

- Cumbernauld College
- Carnegie College
- John Wheatley College
- QMU
- Cardonald College
- South Lanarkshire College



## Forthcoming assessments



#### FPR, OR and SR

- Anniesland
- Borders Netherdale
- Jewel and Esk
- Langside
- Motherwell



#### Strategic Review

- Cumbernauld College
- Carnegie College
- John Wheatley College
- QMU
- Cardonald College
- South Lanarkshire College
- Dumfries and Galloway
- North Glasgow College
- Jewel and Esk College
- Borders College, Hawick Campus



## POE case studies





#### Facilitated discussions

- 3 groups, 45 minutes plus 15 minutes feedback
- Sharing lessons from HE/FE projects
  - What went well and what didn't go so well
  - What you would differently next time
- Topics
  - Project Management
  - Technologies
  - Operation / maintenance
  - Procurement
- 1 key lesson from each topic to feedback on

