

“Feedback in design is a hackneyed yet useful concept ...”

Building Performance Research Unit, 1972

Module 12/15

Post Occupancy Evaluation

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Sustainable Building Design

Achieving sustainability requires us to live within the limits of the earth's capacity to provide the materials for our activities and to absorb the waste and pollution that our activities generate.

The construction, fit out, operation and ultimate demolition of buildings is a huge factor in human impact on the environment, both directly through material and energy consumption and the consequent pollution and waste, and indirectly, through the pressures on often inefficient infrastructure.

There is already a significant amount of information available to all professions on how to design buildings that are attentive to the needs of sustainable construction. However, most practice still falls radically short of applying even the most easily applicable principles in the majority of projects. Opportunities that could bring real advantage are being missed every day. The result is that buildings and the industries which supply building designers with products, materials and services are less efficient, less economical and more polluting than they might otherwise be.



Unlike other topics in the series, practical guidance on post-occupancy evaluation (POE) is not widely available and case studies are few and far between. Although it is now quite well recognised, many more preach its virtues than actually carry it out. As a result, much of what has been written on POE tends to be theoretical or adversarial rather than from 'real' building studies.

A major exception is the series of studies published in Building Services Journal from 1997-2002 under the Probe acronym (Post-Occupancy Evaluation of Buildings and their Engineering). Because the Probe studies are in the public domain (most POEs are not) much of the material used here comes from Probe. They are all real, rather than disguised, examples because these are much more educational.

In theory, post-occupancy studies ought to cover all aspects of building performance - space, cost, aesthetics, operations, use, occupant satisfaction, management, environmental performance and so on. They should also take due account of the context in which a building was procured, briefed, designed and occupied. Context usually turns out to have a much more important influence on performance than initially envisaged.

In practice, POEs are less ambitious, because doing everything on the wish-list is usually too time-consuming, expensive and, sometimes, disruptive. Probe has shown that 80 per cent of the story can be gained by collecting 20 per cent or less of possible data. Concentrating on achievable targets using tried-and-tested methods is the best way to get useful information from a POE.

Continuous Professional Development

This CPD module is the twelfth in a series which summarises the existing sources of best practice guidance on sustainable building design. These modules do not seek to repeat what other documents contain, rather they aim to summarise the most important issues.

Each module provides information on critical aspects of a particular topic and sources of further guidance by way of an annotated bibliography. Case studies are intended to provide depth to improve understanding and encourage

Objectives

This module provides:

- An appreciation of the usefulness of well-managed feedback from real buildings in use.
- An understanding of why POE has pitfalls, and why practitioners are wary of them.
- An idea of the value of POE at a "strategic" construction industry and national policy-making level.
- An introduction to some of the techniques used in POE.
- An overview of data and statistics used.
- Case studies of recent POEs in the UK.
- Some lessons for design and management arising from POEs.
- An understanding of where to find up-to-date guidance on POE.



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Above: The highly successful Elizabeth Fry building, University of East Anglia.

Left: The Woodhouse Medical Centre.