



## PEB Exchange, Programme on Educational Building 2004/14

# Post Occupancy Evaluation in Scotland

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PEB Exchange Programme on Educational Building

### POST OCCUPANCY EVALUATION IN SCOTLAND

The Scottish Executive, the devolved government for Scotland, is engaging with stakeholders to achieve excellence in the school estate through Post Occupancy Evaluation (POE). Design of the school environment has a direct impact on teaching and learning, activities which can be supported or frustrated by many building elements. Through a collaborative process, evaluating new and existing facilities can benefit all those involved in educational building, from the school users, to the local authority, to designers.



A demonstration evaluation of Craigour Park Primary School, set out by the Scottish Executive, showcases an approach that can enable local education authorities to learn from completed school projects to inform future designs. The local authorities are responsible for the provision of education, in partnership with the Scottish Executive.

The Executive has issued guidance on the principles of Post Occupancy Evaluation as part of a school estate strategy through which significant new funding for facilities is being delivered to local education authorities. Encouraging the authorities to undertake POEs is part of the guidance issued under the strategy, which aims to sustain investment and improve quality over the long term.

#### Functions and outcomes of POE

No school building is perfect, not even a completely new one. In reality, most buildings are the result of engagement between less than perfect clients, architects and builders to construct for a diverse range of occupants who use the buildings in ways that were only partially predicted. By undertaking building evaluations, local authorities recognise that a school building is not perfect, but that every effort should be made to continually improve the educational environment within the resources available. Specific functions of carrying out building evaluations and their benefits include:

- Fine tuning new buildings: A building evaluation provides an insight into how the building and services support and frustrate the activities of the users. In many cases, making slight adjustments such as altering taps or providing additional signage or shelving can offer significant improvements for users. Evaluations also reveal problems that can be overcome by making changes in management practices and procedures, such as directing queuing in a different way, or using alternative spaces for a particular activity or at a different time.
- Improving design for future buildings: One of the most important outcomes of conducting building evaluations as early as possible in a school building programme is to identify what aspects of the new schools have been a success. These aspects should be celebrated and included, perhaps even developed, in future projects. Equally, less successful aspects should be identified, so these can be avoided in future projects.
- Demonstrating best value: Building evaluations can identify ways in which buildings and equipment can be used more efficiently and more cost-effectively. They are also a valuable tool for assessing building quality, particularly in terms of suitability or fitness-for-purpose. This is an important element of estate management planning, and can assist local authorities to demonstrate that the considerable investments associated with building programmes are being managed responsibly and effectively and are achieving best value.
- Building stakeholder commitment: Evaluations support a learning culture by involving users in discovering how well buildings work for them. This participation can engender a greater commitment from users to particular solutions, and more willingness to accept a project's limitations or to face the changes associated with occupying new environments. Participation also assists in strengthening a sense of ownership amongst school users and contributes to capacity building within the wider school community.
- Evaluating existing buildings: Building evaluations can also be applied to existing schools, as an important tool in planning refurbishment projects. They can assist in option appraisal and inform decisions about achieving the optimum balance between levels of refurbishment, remodelling or new build. On an estate-wide basis, conducting evaluations on a number of similar existing buildings can help determine investment priorities on an objective basis.

#### Advantages of a collaborative process

Post Occupancy Evaluation enables local education authorities, schools and designers to work in partnership to achieve the best schools possible.

Buildings derive their value from their utility, and the utility is itself dependent on the occupants so the method provides a structure to "negotiate" both building and use simultaneously.

The focus on building use provides a "common denominator" to evaluation that is inclusive of all interested parties. Consequently, it is egalitarian, in that it creates a forum for all participants to equally express opinions about how buildings are functioning for use. The process is accessible to all people, to present their views in their own ways. Thus it reflects individuals and celebrates diversity of opinion about building needs.

The Scottish Executive encourages Post Occupancy Evaluation in order to promote a culture of collaboration for improving the fit between design and use. The approach is quick and easy for participants to complete.

Another advantage of the process is that it is specific to the Scottish schools and informative for architects to translate requirements into design improvements. It is based on "negotiating" improvements with school users so does not depend on interpreting statistical data.

Freeing participants to discuss any aspect of building use in their own terms preserves objectivity. No single interest group can prescribe the issues as these are generated from the "spatial agenda" of a touring walkthrough interview.

Authorities are encouraged to focus on evaluating buildings in terms of fitness-for-purpose and be inclusive in identifying successful criteria, rather than limiting this to the domain of project professionals.

It is essential, if the Post Occupancy Evaluation is to be comprehensive, that evaluators attract opinions from all stakeholders. A typical school building evaluation engages:

- Students.
- Parents.
- Teachers.
- Non-teaching staff.
- The design and building team.
- The local education authority.
- Private investors.
- Facility and maintenance staff, and service suppliers.

• Independent experts, for example, school building experts, sustainable building experts and disabled access specialists.

#### Method

Post Occupancy Evaluation specialists use interview techniques to ensure participants are free to express opinions in their own ways without interference or influence from the evaluators. The touring walkthrough interview provides a spatial agenda for participants to respond to. Interviews are documented with notes, photographs and (as required) voice tape recordings.



Student evaluation of Craigour Park Primary School

Once the evaluators complete the site work they report on findings and generate recommendations. The report serves to:

- Demonstrate how buildings support and frustrate people.
- Illustrate diverse design requirements.
- Document relevant recommendations.
- Stimulate action for fine-tuning.
- Transparently communicate design requirements.

The report makes building performance explicit with verbatim or paraphrased accounts of the relationships between buildings and people. It documents the performance of buildings and the resulting delight, disgust, passion, pleasure, fear and happiness. It does this by allowing readers to "see" the building through the eyes of the people who are directly affected by it.

#### Getting the most from POE

Education authority professionals can learn from directly observing Post Occupancy Evaluation interviews. However, they must strictly comply with the one requirement to avoid any temptation to comment on participants' opinions and understandings. Participants must feel free to express their opinions and must be informed that their ideas may be used in the design briefing. Demonstrating to participants that their opinions are valued is important in generating a sense of partnership and commitment to managing building design and use issues.

Most Post Occupancy Evaluations reveal several quick, cheap and easy ways to improve learning and teaching with minor fine-tuning of buildings and equipment. Having a small budget set aside can provide for promptly completing low-cost adjustments after the evaluation.

#### **Craigour Park Primary School**

In December 2003, 35 students, teachers, staff, parents and educational and building specialists were involved in a demonstration Post Occupancy Evaluation of Craigour Park Primary School's new facilities. The school has an enrolment of 310 students (with a capacity of 420) plus 100 children in nursery school. (As a demonstration evaluation, the number of participant groups interviewed was smaller than usual.)

The touring walkthrough interviews commenced at the front of the school where participants addressed issues around the relationship of the school to surrounding areas. They made recommendations relating to driveway safety, fencing, the surveillance system and a garden only partially completed.

The nursery facilities – two nursery rooms, a playground, cloakroom, kitchens, bathrooms and storage – were evaluated. Participants noted ergonomic details that they thought could be improved and some that they have already changed. They would prefer more vinyl flooring, a secure playground gate within line-of-sight to entrance doors and more soft surface play area.

The gym-assembly hall for the main school was well regarded, and the dining hall was appreciated, especially for its adjacency to the main corridor making it not unlike a terrace café. The students were dissatisfied, however, with the time allotted to queue and eat their lunch.

The 14 classrooms at Craigour Park Primary School are arranged in two similar wings, each with a large central activity area giving access to the classrooms that have some movable walls. Participants reported that the ability to open classrooms to the activity space and/or to the adjacent classroom works well. One teacher said that he merges classes every afternoon and commented favourably on the result. Students were also positive about



the flexible facilities; one student associated flexibility with learning from other students: "It is really good. We make new friends. You can learn and they help you and that is how you make new friends." There were also recommendations to lower the white boards in the classrooms to within the reach of children and to incorporate surfaces suitable for data projection. Minor changes were suggested for cloak and toilet areas.

In overall terms participants were enthusiastic about the new Craigour Park Primary School. The ample provision of dedicated facilities was cited as being particularly beneficial in improving potential for learning.

In reviewing the demonstration evaluation, the Scottish Executive found:

- The report has a clear layout, focuses on recommendations for improvement and accurately reflects opinions.
- The process gives education authorities the opportunity to observe interviews and collaborate on recommendations.
- The process is clear and simple.
- The single person contact with the evaluation consultant and empathy with users is valuable.

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