#### INTRODUCTION

Head Teacher of Charing Primary School, Rosemary Olley, approached KAC in October 1999 about the possibility of having an 'Architect in Residence' to work with the pupils to develop ideas for improving the School's accommodation.



Charing Primary School was housed in three separate buildings only connected via covered ways. The Victorian block, in particular, was in a very poor state of repair. The school wanted to explore the potential for selling off the Victorian part for redevelopment as housing, and extending and linking the two remaining buildings to create more easily managed accommodation within a single building.



An initial meeting with the Architect and Head Teacher was held in January 2000 to discuss the idea of running an Architectural Residency Programme which would involve the children in the design process.

The 'Residency' was split into two phases: Initial work was carried out, post-SATS, in the Summer Term with the Year 6 and Year 5/4 classes, providing constructive activities for those pupils due to leave at the end of the Summer Term, as well as making the most of their cumulative experience at the School. Further work was carried out in the Autumn Term, continuing with the pupils who had moved up to Year 6.

# **PROJECT PROCESS**

The Architect proposed to 'lead' the pupils through the work that would be undertaken in developing proposals for reorganising the School's accommodation, through a series of structured activities linked to the 'Design Process'. The 'inschool' work started with a whole day session, followed by four afternoon sessions during the Summer Term, and was followed up with four further afternoon sessions in the Autumn Term.

The following sequence of activities was followed:

## Summer Term

- 1. Survey of existing accommodation, buildings and grounds, both measured and evaluative
- 2. Considering the School in its context- the immediate surroundings, the village etc.

- Considering how different spaces in buildings are used
- 4. Considering how the outdoor spaces within the School grounds are used
- 5. Exploration of how the process of building impacts on the environment-'Sustainability'.
- 6. Production of a model of the existing retained buildings, plus notional extension

#### Autumn Term

- 7. Review of last term's work
- 8. Development of ideas for six specific areas within proposed new School building
- 9. Visit from Ashford BC Planner to discuss proposals with pupils
- 10. Development of sketch schemes
- Presentation of sketch schemes and ideas to wider School community

### **REVIEW**

Many of our Schools have to operate out of accommodation that is less than ideal, very often in buildings that were only intended to be a temporary solution to a problem, or that have outlived their original purpose. In seeking to address this problem, all too frequently, the majority of people who are most affected by this state of affairs, the pupils, are not consulted in any meaningful way. This project is an example of how even 9 and 10 year olds have much to contribute to the process of shaping their surroundings, especially when it is a place that they already have intimate knowledge of. Involvement of the pupils in this process can also provide a conduit through which parents, teaching and non-teaching staff and the wider community can participate.

Much of the work that the Kent Architecture Centre carries out is specifically aimed at increasing the involvement of communities in shaping their surroundings, and raising awareness of the importance of high quality design in the built environment. This project, embracing a participatory approach to design, had both of these objectives in its sights.

For Charing Primary School, the project was able to achieve a number of objectives.

- It provided the opportunity to explore the logistics of selling off part of the school grounds to fund the redevelopment of the remaining site to create a single building.
- It provided the opportunity for the cumulative knowledge about the school contained within a group of Year 6 pupils to be channelled meaningfully as their Primary School careers drew to a close- it enabled them to leave a 'legacy'.
- All the work the pupils carried out was relevant to the normal school curriculum.
  There were plenty of opportunities for applying maths skills and knowledge to practical situations, including scale, measuring, data handling and calculation. There were

- opportunities to extend pupils' vocabularies, both written and spoken.
- Pupils needed to work in groups, and were charged with jointly presenting their findings in a variety of ways.
- They were challenged to consider a wide range of complex issues- 'Sustainable Design', 'Local Planning Policy', interpreting drawings and models, and formulating opinions about how buildings are designed. The Planning Officer who visited the School was impressed at the questions posed by the pupils in relation to the proposals to redevelop the school site, commenting that they were able to discuss the issues far more objectively than many adults he came across in his work!

It can be seen that this single project responded to a number of the School's priorities- it contributed to the Whole School Development Plan process, it met National Curriculum requirements, it encouraged pupils to think about their school within the context of the wider community, it introduced pupils to adults (Architect, Planner, Environmental Consultant) other than Teachers, and it demonstrated that children's views are valued.



### **OUTLINE OF ACTIVITIES**

A brief description of how the above activities were organised is given below:

1. The starting point for any architectural project always involves collecting information about what exists- whether it is a bare site, a group of buildings or just an idea in someone's head! The only plans that the School had were very diagrammatic, so the first activity was designed to collect as much information as possible about the existing buildings so that proper scale drawings could be prepared. The Architect visited the site and measured around and between the external faces of the existing buildings, and also took a comprehensive set of documentary photographs. Using information an outline of the buildings was drawn up at 1:100. In order to generate the internal layout, the Architect divided the internal areas into about twenty different 'rooms' and allocated 2 or 3 pupils to each room- they were to measure and record the measurements following the instructions given. Pupils were then shown how to draw up these measurements onto squared paper to scale (1:100), so that they could be cut and pasted onto the outline plans already prepared. In addition to the measured survey, the pupils

were also given a questionnaire headed 'What's your space like' in which they had to respond to some twenty or so questions about the space they had been measuring. All activities were carefully explained in detail to the pupils so that they could fully participate in the process.

- 2. To help pupils see the school in the context of its surroundings, the Architect prepared a worksheet, which included a plan showing the School within the context of the village, together with some tasks, which were discussed before being undertaken.
- 3. The Architect led a whole class discussion about the spaces that would be needed in a new extended school building, and how these spaces might have differing requirements. The pupils then completed a series of worksheets, prepared by the Architect, designed to make them think about how different rooms in a building relate to each other, through use of rooms, what activities happen in them, and which rooms need to be near other rooms etc. This process of thinking about the spaces needed within a building and how they relate to each other is a fundamental part of how an Architect develops a 'brief' for a new building.
- 4. The Year 6 pupils undertook a survey of the school grounds- they were divided into seven groups and each group was given a particular aspect to investigate. Each group then reported their findings to the rest of the class. Year 5 pupils were asked to sketch out their ideas for use of the school grounds, and these formed the basis for a discussion on the range of issues which need to be considered, including playtime needs, curriculum-related needs, health and safety issues, vehicular and pedestrian accessibility etc.
- 5. The issue of the impact that the process of constructing buildings etc. has on the environment is very complex, but it is of vital importance, especially to the next generation, ie school children. The Architect devised a 'Sustainable Design game' that involved linking cards showing various building materials, processes, resources to demonstrate that, ultimately, everything can be traced back to our planet, Earth, and the Sun. (NB Since this session, the Architect has developed these ideas further and a Powerpoint presentation has now been specially devised to illustrate 'Sustainable Design' to Primary School age pupils.)
- 6. The Architect prepared 1:100 scale drawings of the existing school buildings, based on all the information which had been collected, and also made a model showing the two buildings which were to be retained, plus a series of spaces or

rooms which could be moved around to show different possible arrangements. The Architect used the model as a basis for class discussion about a range of key issues: how the proposed new buildings might link onto the two existing retained blocks, which spaces need to be near to each other to create 'suites of rooms', whereabouts vehicles come into the site, and how they can be kept away from pedestrian routes. The Architect then worked with small groups of pupils, providing the chance for them to experiment, 'playing' with the model, moving rooms around, testing out ideas etc.



- 7. The first session of the Autumn Term started with a review of all the work that had taken place the previous term, refreshing memories after the summer holidays. The new Year 6's were split into six mixed ability groups, and each group was given a particular area to focus on: Entrance Hall, Dining Area, Junior Classrooms, Toilets + Cloakrooms, Library and the outdoor spaces. The groups were to prepare sketches and written work to illustrate their ideas for their particular area. This work was continued during the week as part of their lessons.
- 8. Each group, in turn, were asked to present their 'work-in-progress' to their classmates and the Architect. The Architect took notes, which would be used to help with preparing a Sketch Scheme for the next session.
- 9. The Architect invited a Planner from Ashford BC to visit the school and talk to pupils about the planning issues which would arise from developing part of the school site for housing and extending the remaining school buildings. Following a lively discussion, the pupils led the Planner on a site walkabout.
- 10. During the second half of this session, the Architect presented two Sketch Schemes, which she had prepared, and invited the pupils to make comments about how they thought the ideas could work, followed by a 'master-class' type session where the Architect sketched out a further version in collaboration with groups of pupils. The three Sketch Schemes were left on display at the School for anyone within the school community to comment on.
- 11. The final 'in-school' session involved both the pupils and the Architect making a presentation to the wider school community of both the Sketch Schemes and the pupils' ideas.

# **PROJECT SCHEDULE**

The following Schedule provides an indication of the amount of time involved, both in class, and in preparation, for a project of this type.

Preparatory work before session 1: Initial visit by Architect to School to discuss project with HT 3 hrs, visit by Architect to measure externally 1½ hrs, Architect draw up survey 1½ hrs, Architect to prepare material for session 1, 4 hrs. Total 10 hrs.

Session 1: Intro/ survey activities Whole day in School. 6½ hrs

**Preparatory work for session 2:** Preparing worksheets 2 hrs

Session 2: Use of spaces/ discussion/worksheets Afternoon in class, 2½ hrs

**Preparatory work for session 3:** Preparing site plan survey sheets 2 hrs

Session 3: External survey/ Use of school grounds Afternoon in class,  $2\frac{1}{2}$  hrs

Preparatory work for session 4: Preparation of set of cards for 'Sustainable Design activity' 6 hrs

Session 4: Sustainable Design Afternoon in class, 11/2 hrs

**Preparatory work for session 5:** Drawing up 'as existing' plans, getting prints of drawing, making model, 7 hrs

Session 5: Model/ discussion Part day in school, 4 hrs

Session 6: Review / group work on areas Afternoon in class,  $2\frac{3}{4}$  hrs

Session 7: Group presentations Afternoon in class, 21/4 hrs

Preparatory work for session 8: Preparing 2 Sketch Schemes incorporating ideas from groups, 6 brs

Session 8: Planner visit/ Sketch Scheme presentation/discussion with class Afternoon in class, 21/4 hrs

Session 9: Presentation by Architect and pupils Afternoon session, 2 hrs

**Final work:** Compilation of Report on Project, 7 hrs

In terms of planning future work of this kind, it is instructive to note that, although the 'in-class' time was the equivalent of 5 days( I whole day plus 8 x ½ days), there was considerably more time spent in preparation- some 40 hours. In addition, travelling time has not been included in the above figures. Other sundry expenses which should be taken into account include photocopying, photographs and model-making materials.

