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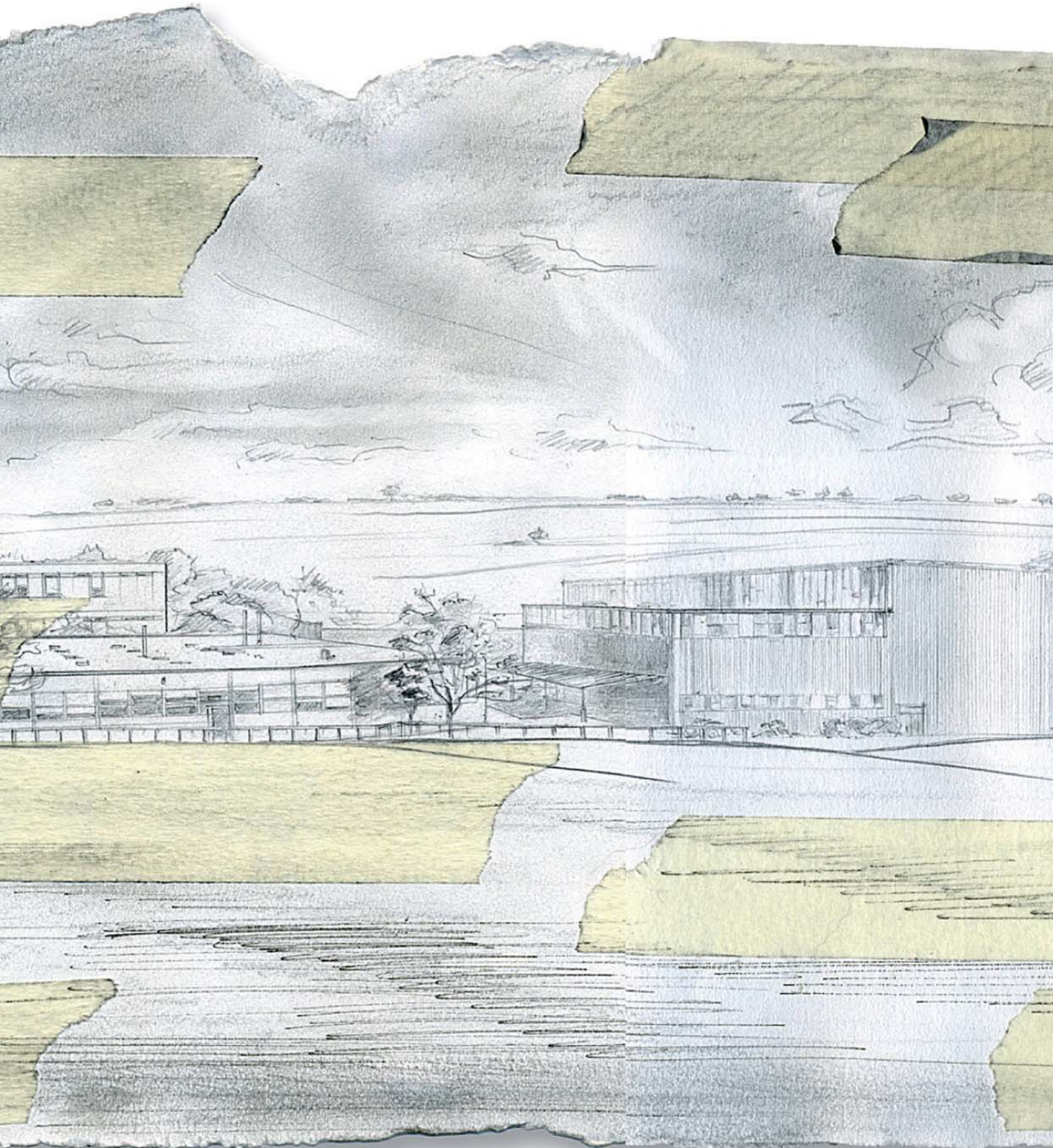
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MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS



This project was carried out by the Kent School of Architecture with Dylan Haughton Architects, with Timothy Brittain-Catlin and Dylan Haughton as lead researchers.

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INTRODUCTION

In the autumn terms of 2008 and 2009 the Kent School of Architecture (KSA) at the University of Kent (KSA) with Dylan Haughton Architects ran a project in conjunction with Longfield Academy which enabled undergraduate architecture students to work with school pupils on the design of buildings for their school. The work that our students carried out during the course of the project will form part of the ongoing national School Ideas Project, organised by ASD at London Metropolitan University on behalf of the Royal Institute of British Architects (RIBA) and the Department for Children, Schools and Families, and will be published and exhibited at a later stage.

This report concentrates on the implications of our work for architects, architecture teachers and students, and academic managers in universities: it takes the form of a comprehensive response to situations as we found them in practice, and concludes with our recommendations as to how other architecture schools could gain from our experiences. In particular, we have been able to assess not only student and pupil attitudes towards the work undertaken but also the many practical and professional difficulties in running such a scheme. We believe that these point to how projects of this kind might play a role in the future development of architectural education and that this information will have great importance as architecture schools develop in coming years.



Sam Rigby, sketch, autumn term 2008

THE BACKGROUND

The subject of the interaction between children and architecture has interested one of our authors for a long time.¹ On 21 September 2007 *Building Design* reported a recent comment

by the then president of the RIBA, Sunand Prasad, during the course of the annual Stephen Lawrence memorial lecture. The president's words were

In schools of architecture you get very, very little teaching about architecture and design from other parts of the world. Mostly you get to study white architects and white architecture.²

The president was addressing in particular what he saw as a need to widen the appeal of architectural education as offered by British architecture schools. According to *Building Design*, his lecture went on to say that

When he was a student, he did not feel engaged by the curriculum, but said schools could change 'tomorrow' if they wanted.

'It's an easy win for schools of architecture. A little change to the curriculum, a little mix of culture and different cultural solutions will benefit everyone'.

The motivation for our research at KSA was our conviction that architecture schools can reach out to a wide audience without necessarily having to engage in a complicated rewriting and recasting of the current curriculum. We were interested in seeing whether we could find a practical way of broadening our appeal as a school through engaging with what lay on our doorstep, rather than by adopting what might end up as a selective and meretricious approach to the teaching of architectural history and technology.

All architecture schools are, broadly, encouraged to work with their neighbouring communities and to share knowledge with them, as indeed are all university departments. In fact at the time of writing it appears that a willingness to engage in this way will become at least one criterion that will influence the funding of departments, part of the move towards accepting the value of 'impact' in the work of academics. What 'impact' will mean when the time for assessment comes is not clear, but there seems at present little doubt that it will involve using our skills to transfer knowledge out of the university. Our university runs a Partnership Development Office (PDO) which specifically seeks out and builds up relationships with schools in our region – giving priority to those with a weak record of sending pupils to university. We thus had both a degree of motivation in engaging with schools ourselves, and also some assistance in directing our efforts towards the type of collaboration we were aiming for.

From informal links, and in particular from conversations in connections with a 2009 conference in Nottingham (see below), it is clear that many architecture schools have had successful and imaginative links with primary and secondary school pupils in the past. What was to make our collaboration distinct, however, was the fact that we wanted to ensure that any project we undertook was fully part of our own students' training and education – that is, that we built our project into the normal curriculum of our school and did not compromise in any respect regarding the need to maintain the standards expected of us through our validation by the RIBA. We also wanted to ensure that the process was part of, and contributed to, our university's general commitments, and general expectations for the structuring and management of our department. Now that we have run this project over two academic years, it is our experience in precisely these practical areas which contributes, in our opinion, to the wider value of this report. We aim to flag up the potential problems, and in particular the conflicts of interest, involved in this type of undertaking, and we also point

towards legal areas which must be usefully considered when planning collaboration projects with schoolchildren or schools. Everybody who works in architectural education is likely to face similar situations sooner or later.

SHAPING THE PROJECT

When we started planning this project in the early summer of 2008 we looked around for partners with experience who could help us get started. At the time the prominent name in the field of design student-school pupil collaboration was the Sorrell Foundation, a charity which was established by Sir John and Lady Sorrell at the beginning of the new century to encourage comparable ventures, or in its own words ‘to inspire creativity in young people and to improve the quality of life through good design’.³ In particular, an initiative called the Young Design Programme that had been launched in 2005 planned and executed collaborative student-pupil projects mainly in the fields of landscape architecture, fashion, interior design and industrial design. These activities had been widely published and advertised by the Foundation in the form of exhibitions, day events and large-format brochures.

There was one essential difference between all of these disciplines and that of architecture. Validated architecture schools are required to provide a series of elements that are outlined in the RIBA’s *Criteria for validation*, and which in practice are largely defined by a number of specific requirements intended to ensure that all students are proficient in a range of different technical and theoretical skills. On the positive side, the *Criteria* (since their last revision in 2002) state that

A course that meets the requirements of the criteria must also provide an opportunity to pursue related, specialised, or optional studies. The form and content of related, specialised and optional studies are a matter for each institution.

Diversity in course provision is encouraged for programmes that, for example, link architecture with other subjects, emphasise research, develop specialisms and promote advanced degrees.⁴

But nevertheless undergraduate students in an architecture school cannot ‘opt out’ of proving their proficiency at any from a list of specific skills, and any architecture school that encouraged them to do would be acting negligently in terms of the education it was expected to offer. And this need to provide our students with a properly structured and assessed architectural education made our situation different from any of the schools which had worked with the Foundation at this point.

Furthermore, in projects supervised by the Sorrell Foundation students worked in groups because they were all not required (for example, by the validators of a professional institute) to submit for assessment work that they had carried out on their own. And, finally, the Young Design Programme created real artefacts: new school uniforms were designed, or areas of the school refurbished or redecorated. A similarly ‘real’ architecture project would mean the erection of a ‘real’ building, something not plausible at this stage.

We did however feel at the outset that there was much to be gained from collaboration with the Foundation because they had already developed a model for running this type of projects. Their starting point was that pupils should act as clients for design students. This led to the crystallisation of a series of events that were spread over a period of about 15 weeks, punctuated by four main stages: the Challenge, in which pupils choose a design project and brief students; the Brief, where this project is presented in greater detail; the Conversation, described as a period of interaction; and the Concept, where students' ideas are presented to their 'clients'. The project ends with a celebration day where public presentations are made by participants on both sides and certificates distributed.

We felt that this offered a valuable model; in particular, we liked the Foundation's introduction of a professional mentor who would on at least one occasion host students and offer advice. We also liked the way in which the Foundation's projects were always based on changes to a school's own campus, a place the pupils knew well and could easily relate to – and, of course, in general a place not that distant from our students' personal experiences. We were however aware of the fact that to participate in the programme as the Foundation usually organised it would be impossible because of the differences in outputs outlined above. Nevertheless, we met the Foundation's representatives in the Spring of 2008 and agreed in principle to a collaboration on an experimental or pilot basis.

Bearing in mind our original starting point, we were thus now able to define our project specifically in terms of a research undertaking, on the following basis:

RESEARCH QUESTIONS: what problems do architecture schools face when undertaking collaborative design projects with schoolchildren? What advantages could these collaborations hold for architecture schools?

RESEARCH AIMS AND OBJECTIVES: to highlight specific and practical areas of concern and consideration arising from the undertaking of collaborative design projects.

RESEARCH CONTEXT: the need for architecture schools to demonstrate a commitment to creating impact for their work; to engaging in local communities by exploiting their natural areas of strength; to investigating areas of audience development; to responding to young user feedback in respect of school design.

And we defined the following as our aims:

ORIGINALITY: this would be the first published submission by a university school of architecture that details the methodology, practice and analysis of working with schoolchildren as part of a validated programme of study in the current political and social context

SIGNIFICANCE: this project would provide practical information for schools of architecture in order to enhance their programmes of study, as well as material that would enrich debate about contemporary directions in education

RIGOUR: the project would be undertaken as part of a planned and coherent programme of Part I study, and take into account all the practical, ethical and legal factors involved in the coordination of the programme with other parties

COMMUNICATION: this project would be published and circulated to the RIBA, to architecture schools and beyond; and our students' work would be exhibited in the framework of the national Schools Ideas Project.



Haroon Noon, 3D visualisation, autumn 2008

GETTING ORGANISED AT KSA

Once it had been decided to go ahead in principle we had to decide how to implement it in practice at KSA and it is from this point hence that our experience indicates the complexity of this type of collaboration.

In the first place, we decided that this would be a suitable project for students in the first term of their second undergraduate year of study. This came about because we did not want to introduce students to the project before they had begun to develop their first architectural skills, and therefore wanted to avoid the first year; likewise, we didn't want to risk any distraction from the course of study in the third year when students are concentrating on their portfolio for submission for the BA (Hons) Architecture and RIBA Part I exemption. In fact it was considered preferable to keep the project away, at least in this pilot stage, from the examination and assessment period at the end of the academic year. The first term of the second year of study appeared to offer the best 'slot' for the project: here the regular major design course ('module') is called 'Adapt and Extend', and in it students design alterations to existing buildings. In addition to this, we also felt that the modules that ran alongside Adapt

and Extend would be well suited to accompany any school project: these were the 'Post Enlightenment Interior' module, a history and theory course which provides a series of case studies in developing buildings types and ideas drawn mainly from nineteenth-century architecture, and 'Advanced Computer Modelling and Animation', which develops students' technical abilities and ends up with the creation of a virtual interior drawn from the student's own major design project of the term. The autumn term is 12 weeks long and in 2008 ran from 29 September to 19 December.

In September 2008 KSA admitted 105 architecture students, and the detailed planning of the Adapt and Extend module was devised by its convenor Timothy Brittain-Catlin. It was decided at the outset that the school project would proceed on the basis of exactly the same learning outcomes as those agreed and adopted for the rest of the students undertaking Adapt and Extend. In this way we intended to guarantee to students that they would not miss out on part of the learning experience shared by their peers, and also that they would achieve the same learning outcomes, and face the same type of assessment, as those of the other students in their year. This parity of assessment also suggested the approximate scale of the proposed school project: about 1,600 square metres.

We divided the second-year design project students into groups of up to 20, each taught by either a staff member or by a sessional design tutor who is usually a full-time practising architect. Students were generally allocated to a group randomly, although at this stage University departments were still entitled to make slight alterations to the groups in order to ensure that there was an equal spread of abilities based on the previous year's final assessments. We felt that our school project required volunteers, however, since its day-to-day process was evidently going to be different from that of the rest of the students in the year. We decided to advertise for these volunteers at the very start of the autumn term, in mid September 2008, by sending out a message to all second-year students stressing that the project was an unusual one, but that it was well suited to those who wanted to work on a project that required working with 'real people', school children, as clients. We stated that we needed about 20 volunteers and in fact in the end we had about 25, or about a fifth of the year as a whole. From these we chose the top 19 simply on a first-come, first served basis, in the interests of fairness.

We now needed a school partner. The University's PDO maintains contact with a number of schools in Kent, and organises events on our Canterbury campus (and elsewhere) for secondary-school staff in order to introduce them to academics and specific proposals for collaboration; the PDO also operates a student ambassadors programme in which current students visit local schools, and it runs summer schools and open days. In its own words, and in the spirit of the mission statement of the University as a whole, the PDO

focuses on the establishment of partnerships that facilitate widening participation objectives in the sub-region. The Office provides the first contact point for partnership-based development and it links between the University and potential partners and their learners. Partnerships will range from strategic regional partnerships to learner-focused work with local communities.⁵

We had opened discussions at an early stage with our own faculty representative to the PDO, and she took great trouble to introduce us to a school that might be interested in collaborating with us. It is worth pointing out that in the current climate some schools may feel patronised, especially since it is in the nature of these collaborative proposals that they are aimed at schools that are considered needy. We found a partner very close to the beginning of term in the form of Longfield Academy, which had only just been established from what had been Axton Chase School, at Longfield in north-west Kent. Henceforth we dealt directly with the Head of Art at the school, who undertook to coordinate the project through a teacher who would run the actual classes concerned. As it happened, Longfield Academy was itself then in the stages of procuring an architect for a new campus, and thus the engagement of pupils with the processes of architectural design could be fortuitous.

One of the major points that was perhaps less obvious to us than it should have been was the fact that a partner school must itself have full involvement in the timetabling of the project. We had assumed that a regular weekly or fortnightly slot at the school would automatically coincide with a particular class there; in other words, that it would be relatively easy for a single group of schoolchildren, of whatever age, to be able meet our students on each occasion if the timetable was a regular one. This turned out not to be the case; we had underestimated the complexity of the timetable on their part, the first major lesson for us. In the event, the pupils who attended the joint sessions that made up the project came from different age groups, and were not necessarily able to attend all events from start to finish: the timetable for most, in fact, was a fortnightly one, adding further to the complication. The PDO supported our project by financially supporting events held in conjunction with pupils at Longfield Academy – primarily, the teaching and organising time of the tutor where he was actually with the school pupils or dealing directly with them or Academy staff which, taking into account practical arrangements, emailing students, and dealing with incidental problems could take up as much as a day a week; the PDO also covered the cost of travel to Longfield station for each of the students on every occasion they went there. The PDO also supported the hours spent by the overall module convenor when dealing specifically with the school, on average about 1-2 hours a week. Thus one distinct advantage to our department was that some of the overall teaching time of one member of staff was to be paid for, a slight saving on our normal budget. Any architecture school undertaking a project of this kind will need to bear these considerations in mind.

A full-time member of staff was appointed tutor for the Longfield Academy group of students. It then remained for us to devise a brief for the module, that is, to write up a detailed timetable that also defined which pieces of work would need to be ready for which deadline. The idea was that the KSA module convenor should write a brief that applied to the whole of the second-year module, and that during the early stages of the term our Longfield Academy students would develop a detailed version of it to suit the outcome of their discussions with pupils. Because of the necessity of arriving at learning outcomes which were shared by the rest of the students, this would require starting from the end – the general submission requirements, shared by the whole of the second year – and working backwards. The submission requirements are listed and described in Appendix One, and are of the kind familiar to all architecture students; it is however worth noting that the final assessment includes technical, constructional and environmental elements reflecting the fact that this module included teaching days on these subjects. This general brief contained no programme for the building to be designed because of the idea that this would be worked out in

collaboration between students and pupils engaged on the school project. The rest of the students received a detailed brief with this information (in their case, for a study centre on an historic site in Broadstairs).

The second important element of the module brief is its timetable. In general, students spent a day a week, Thursday, with their studio teachers; on another day, Wednesday, they attended events such as lectures, seminars and individual or group tutorials with environmental and construction lecturers. In response to student feedback the previous year, we wanted to include in our timetable more intermediate events and more deadlines, because the opinion students had expressed at the conclusion of the previous year was that the overall course of study in the second year should have a more clearly defined shape. To that end we scheduled in two design projects, both of which would have to be introduced and subsequently presented at Thursday morning sessions; for this to work, we had to restrict the number of opportunities that students could travel to Longfield. All of our students were offered the opportunity to take part in trips abroad during that autumn term; this removed another week. Finally, and significantly, the Sorrell Foundation's usual schedule required days to be set aside for other activities – including an introductory event at KSA and a meeting with mentors; furthermore, Foundation staff would need to be available to attend on these occasions.

This describes the overall complexity of the situation regarding timetabling. It is important to remember that our students also faced assessment for their other two modules (history and theory, and computer modelling) towards the end of term. As can be surmised, once the Academy's own timetabling was included – not forgetting for example its two-week half-term holiday – very few slots were available in which our students could actually work together with pupils on the latter's own territory. In fact for it to work at all we needed to persuade our students to do a timetabling swap, exchanging on one occasion an irregular day at Longfield in exchange for a 'day off' on another day. In the end we were able to timetable six teaching days at Longfield, with two other days allocated for events in London – one of which being a visit to the offices of Jestico + Whiles, our proposed mentors, who were then in the process of being appointed architects for the Academy's new campus. The remaining timetable slots would be spent at KSA. We intended to hold a concluding event with an exhibition and presentations at KSA at the beginning of the following term, not least because there were no further available slots towards Christmas and clear of our assessment deadlines. This again made demands on our students beyond the normal expectations of the timetable.

As for the detailed scheduling for the days to be spent working on the project, we were to some extent inhibited by the fact that one of the purposes of the project was to devise a brief together with the pupils; and that meant that we could not tell at the outset how long this would take. It took a month – until the first week of November – before our students could state and analyse the pupils' wishes for architectural changes to their campus. In general, we told our students that they would be designing a new structure on the Academy campus; that they would begin by working in groups, and that they would towards the end have to concentrate on working up a scheme of their own in order to be able to submit the same degree of personal work as the other students in their year. In the end our Longfield students were separated from their peers in the execution of the first of the two year-wide design exercises.

EXECUTING THE PROJECT

COORDINATION AND COLLABORATION

The execution of the project turned out to be problematic to the extent that it influenced the overall timetable and procedure; for that reason this section concentrates not so much on the content of the project and the work that it produced – which in any case will, we hope, be presented in the course of the national Schools Ideas Project – but more on the problems that arose. Being aware of what these problems might be, and facing them at the outset, will in our opinion be crucial for any other architecture school that is interested in developing a similar collaborative scheme.

It is in the nature of these problems that they come from unexpected quarters. As the term started it became apparent that the teacher allocated to the project was unable to continue for the course of the whole term. Just over a week into the project, Dylan Haughton, an architect in private practice in London with experience of teaching at KSA, came in to take over; he had recently worked on a common room and shower project for the Lycée Français in Kensington, liaising throughout the process with teachers and sixth-form pupils, and this made him a suitable candidate to run our project. It is possible that for an innovatory project of this kind it is not entirely possible to foresee what the responsibility for teaching it will entail until it actually gets going. Although an overlap between the two teachers was possible, the reallocation of the responsibility for teaching the group inevitably caused some disruption to the early stages of the project – in particular in terms of the perceived lack of clarity in the project's overall form, which, as will be seen, was seen by students as the most significant problem later.

We had further unexpected problems in our relationship with the Sorrell Foundation because of the way in which our project diverged from others that had formed part of their Young Design Programme to date. These problems appeared at first to be almost entirely to do with restrictions on our students' time and the limited scope for varying our timetable which we have outlined above. All but two of our students, for example, were unable to attend a joint event held by the Foundation in London towards the end of the term because it came too close to their final assessment date, and this caused some disruption in our relations with the Foundation. The problem here was the date had been arranged with the majority of the Foundation's other collaborators in mind – and they had only just launched their own projects. In addition, the fact that every student had to end up with a design project of their own, rather than playing a role in a single group project, meant that at least half-way through the term the emphasis of the collaboration overall changed somewhat. In the event, the Foundation formally left the project nine days before the end of term, after it had spent a month considering the issue of a press release which was, in the event, never issued. We have summarised our conclusions on problematic aspects of collaboration in the final section of this report: it is sufficient to note here, in respect of the Foundation, that we felt that the timetabling and other problems were at heart due to the fact that the Foundation aims to prioritise the pupil rather than student experience, and this evidently would need to be born in mind in the future.

One further event that was quite unanticipated arose after a student, on their own initiative, contacted Kent County Council to ask whether they held any plans for the Academy's existing buildings; perhaps because of a plethora of schools-initiative projects, the student was put through by a confused assistant to an officer responsible for outreach projects, who immediately contacted senior members of the university (including the vice-chancellor) to ask how such a project could have been allowed to go ahead in the first place without his involvement. It seems to us a point worth stating that architecture schools do in fact need to be aware that other public bodies might see collaboration as an incursion into their own field of responsibility.

EMERGING PROBLEMS

For us as teachers, however, the most serious problem that we faced was the fact that many (although by no means all) of the students found it difficult to become engaged with a project that seemed to them to suffer from a degree of shapelessness. Most student projects, including that then being undertaken by their peers, have a definite form to them. A given brief, especially in the second year of study, tends to be fairly precise in its requirements: it states definite stages to be reached at certain points in the term, and requires students to prepare what are eventually to be definite drawings, models, or other media to communicate them. It is also true that school pupils shared an expectation that an art class would consist primarily of making or drawing things, rather than the 'talking about them' that devising a shared brief entails.

Working on the Sorrell Foundation's preferred basis, in the role of their designated 'programme manager', Dylan Haughton organised the first three meetings between students and pupils around the principle of identifying problems with the existing school building, and together with students prepared summary lists of their observations (see Appendix Two). Subsequently, groups of pupils prepared 'picture briefs' with the help of students, and presented them at shared feedback sessions. What we hoped to achieve through this was a practical demonstration for our students of the processes of analysing the needs and content of a brief. Our students found however that the pupils' comments, although enthusiastic and generally aware of the character and use of parts of their existing school, were often inconsequential or inconsistent, and pupils in a large group had quite different opinions without sensing any need for agreeing anything between themselves. It was thus not necessarily possible or helpful to put them together to create an overall brief for improving the school's buildings.⁶ In addition, they found that the 'common issues' (included in Appendix Two) identified by the Sorrell Foundation as tools across the whole of their Young Design Programme, and derived mainly from fashion, graphics, product or interior design projects were inadequate for the design of a building.

But this constituted only part of the problem. The process of trying out ideas over several weeks, according to the opportunities available for meeting the pupils, meant that this brief development process became a lengthy and disjointed one. We did not appreciate that our students were finding it hard to grasp that the brief development stage, and the process of engaging with real people in a real place, seemed to them to be extremely vague. They could see that by contrast their peers were getting on with their design work, producing prescribed drawings for timetabled assessment stages, and they became anxious that their lack of these

drawings or deadlines would penalise them when it came to assessment at the end of term. These problems were raised with the module convenor and on more than one occasion directly with the Head of School. We found it hard to persuade them that it was in the nature of this project that the development of the brief with and in the Academy was itself part of their educational process, and that while they eventually did have to produce the same set of drawings as everyone else, marking would necessarily take into account the special process involved and the architectural skills acquired and demonstrated throughout. It is indeed true that students found that the actual design development took up a relatively short period – about a month – compared to that of other members of their year. In the event, our students proposed architectural interventions to the existing campus which varied in function but which shared the common requirement of all students in the year to demonstrate engagement with existing fabric.

CONCLUDING THE YEAR

The event that concluded the project was a day of presentations and activities at KSA on 6 February 2009, an occasion that was of addition significance to us because it enabled us to assess whether we and our students had succeeded in communicating the values and significance of architecture to our young audience. Pupils arrived at the beginning of the day by coach and presented a set of drawings and models they had made of playground installations. They watched presentations by a selection of our students and voted on their favourite scheme. We gave the pupils lunch in the University refectory, and in the afternoon held a competition to building bridge structures out of spaghetti. In addition to providing an opportunity for the pupils to get to know the University, this day also provided students with an opportunity to make formal presentations to a larger group which included PDO representatives as well as the other students and tutors who attended.



KSA student Natasha Fulcher presenting her work to Longfield Academy pupils, February 2009

This day's events required a degree of familiarity with the special risk assessment procedures involved when schoolchildren visit an architecture school (such as the continuous presence of a female member of our staff), but also with the many restrictions required when children are

present and photographs are being taken. Some children could be photographed by the Academy, but not by anyone else; some could be photographed but the image could not be reproduced; some images could be reproduced, but only by the Academy; and some children could be not be photographed at all. (In addition to this we were later to discover, on a site visit with pupils to a leisure centre in London, that no photography was permitted there either!). Thus we learnt that a semi-public event involving children cannot be recorded in the usual ways; indeed we later heard from other architecture school teachers that no recording could be made of any kind, including the recording on paper of pupil's names, during the course of a project the purpose of which is in part a public exercise in demonstrating a university's commitment to its community. The particular problems relating to the government's proposals to introduce a sweeping vetting and barring scheme arose only during the following year; during the Autumn 2008 session our students could operate within the Academy on the basis of what was then called the 'List 99' check so long as they were accompanied and supervised by the Academy's staff at all times.

We enjoyed throughout the course of the project that term the full support of the Academy and its staff; in this respect the relationship was a very fruitful one, and indeed perhaps one of the major reasons why it was decided, with the generous support and commitment of the Head of our School, to continue the project the following academic year. By all accounts the pupils enjoyed the experience, and the Academy found that the experience was worth repeating, especially since some of the practical difficulties, for example with timetabling, would be less of a problem the second time around, and with time to plan them adequately.

LEARNING FROM THE FIRST PROJECT

Dylan Haughton kept a record of his and his students' experiences on the project, and summarised them in an internal paper submitted to KSA once the final event was completed (see Appendix Three). This paper formed the basis for our revisions to the project when we came to reformulate it for the second academic session in 2009. Dylan Haughton's report summarised the key elements of the experience as follows:

- *It's vital that all contributors be prepared for the start of term and have as clear an idea of the programme, timing of key events and aspirations as possible at the outset.*
- *A high level of co-operation is required from all contributors, the occasional imperfection needs to be accepted and overly prescriptive approaches will not help.*
- *Working in clear groups is a way to make the project manageable given the numbers involved, changes of location etc. and the institutions should attempt to make this happen.*
- *It may be better to tailor the brief to the reality on the ground to a greater extent.*
- *Enormous mutual benefit resulted from the collaboration.*

In other words, the major practical concerns in the running of the course were the degree of coordination between all the parties as the project starts; the acceptance of the aims of other parties, which may be different from those of for example the KSA students; and the degree of clarity in the definition in the design project. In practice these elements provided the 'rigour'

which any a research project needs in order for any useful and generally applicable conclusions to be drawn from it.

These points are not quite as obvious as may at first appear. Firstly, there are far more parties involved in the process than in the case of a normal student design project, and these extend well beyond the teaching, managerial, administrative and technical staff of the two educational institutions. We involved not only a mentor architect – specifically, Heinz Richardson from Jestico + Whiles (and, eventually, their schools project architect Martin Gibbens who attended a crit) – but also a further head teacher and schools consultant, Sue Brown. This required creating a project management system which is more akin to those seen in wide-ranging commercial operations than in higher education. Our experience with the Sorrell Foundation highlighted the fact that the interests of an architecture school may not necessarily coincide with anyone else's, however well meaning; the Foundation prioritises the pupil experience, whereas we had a basic commitment to ensuring that our own students experienced a full (and properly validated) architectural education. We had different ideas from them about how the results could and should be publicised, and we believed that this was important because we wanted to see that our own students' work was properly communicated, advertised and appreciated: we depended, after all on volunteer students.

In addition to this, we had been generously supported by the University's PDO because our aims coincided with our University's stated policy, but teachers in architecture schools generally might not necessarily be able to count on this administrative and financial support. We were also relatively new to what is in any case a developing field of protection agencies in the most general sense – child protection, health and safety, risk assessment procedures, and so forth; and we were also rapidly introduced to the large number of public bodies that operate at national, county and local level that are concerned with the building of schools and the experiences of pupils in them. The make-up of and relationships between these bodies, and the political weight attributed to them, varies from time to time: the originality of our report is to some extent derived from the fact that it is a response to the current situation. This means that the whole time-consuming business of involving other agencies is not so much an additional bureaucratic task for the architecture school, but rather more a fundamental point to be considered in the first place. Finally, achieving a degree of clarity in the definition of the project was in our opinion the key point: it is problematic to expect architecture students to undertake a project where the formulation of the brief and the engagement with outside bodies takes precedence over eventual output in an academic environment where students are, generally and university-wide, assessed on increasingly definite outputs. One strongly positive aspect mentioned by students was the time spent with the professional mentors, Jestico + Whiles, who not only anchored the school project into a useful professional perspective but also contributed some specific tools – in particular, an insight into how school teaching methods can be reflected into architectural form, or, in simple language, how teaching arrangements can influence the layout of and relationship between rooms. These tools were more useful and relevant for our students than the Foundation's 'common issues' to which they had some difficulty in relating. In fact, it is important to state that the eventual grades gained by members of the Longfield group were similar in scope to those of all the second-year 'Adapt and Extend' students.

Timothy Brittain-Catlin addressed the general points that arose from the first term of the project in a paper entitled 'The Wrong Education' delivered at the Ethics and the Built Environment Conference held at the School of the Built Environment at the University of Nottingham in September 2009. This paper addressed specifically the questions of the conflicts between interest groups in architecture, a concern that had arisen during a debate earlier in the year in the journal *Architectural Research Quarterly*.⁷ The point made in his Nottingham paper was that architecture schools that are departments of universities are in danger of losing sight of their own interests as architecture schools: the need to teach and encourage students to design good buildings. This principally comes about through the adoption of standardised management and examination processes by universities, to be deployed in every department, usually motivated by the ways in which research and publication are currently assessed by the Higher Education Funding Council for England; and by the acceptance and adoption by universities of consumer-oriented and text-based models for student life and progress. Examples of these standardised processes include the way in which a student's timetable is controlled by a central computer rather than in the form of handouts and informal meetings with tutors; the way in which students with dyslexia are given special conditions for undertaking examinations, even where these are irrelevant to the study of architecture; and the adoption of European or American standards of methodology in the assessment of research, a particular problem for British architectural historians.⁸ Another example that has arisen since is the insistence by some universities on absolute anonymity of students not only during the assessment process but also when setting up groups of students for particular design project and their allocation to particular design tutor, all processes contrary to what happens in some of the country's most successful and popular architecture schools, and obviously impossible anyway if a project depends on volunteers, as ours was. All of this is aimed at reducing the impact of the personal and professional judgment of a teacher in favour of box-ticking; the school's theoretical vulnerability to legal action by a student on ground of unfair or unusual treatment is thus reduced too. There are many examples of how the basic *raison d'être* of an architecture school can be compromised through these processes; but much of what architects and architecture do is not necessarily literal or rational, and so not everything can be assessed through anonymised box-ticking. The conclusion of the paper was that projects with school children, which are irrational by nature, could offer a positive and fun way for architecture schools to advertise themselves and what they do, and to find future allies in their attempts to give importance to design and design processes. Here, we believe, lies the much of the significance of our Longfield Academy project: it will emphasise that collaborative projects are not only to do with timetabling, or providing interesting and challenging work for students, but also that they suggest to both schools and university departments new ways of developing and expressing a shared public role and a shared public responsibility to society in general.

These assertions were supported by the outcome of an application we made to the Arts and Humanities Research Council (AHRC). One aspect of new school building that is occasionally suggested without evidence is that pupils themselves have a positive role to play in the design of new schools (such as those funded through the Building Schools for the Future programme). We sought ways of using our work with Longfield Academy to carry out some research in this area. In the summer of 2009 we made an application for a 'practice-led and applied route grant' entitled 'Evaluating Young User Engagement in School Design' to the AHRC (see Appendix Four). We defined the research aims of our proposed project as follows:

- 1) Could a more engaged design process resolve issues endemic in the government's school building programme?
- 2) Can this process help capture pupil's own priorities in school design and provide guidance on how to enhance user appreciation of the school environment?
- 3) How does engaging with social processes, institutional agendas and public policy affect the architect's design process?
- 4) Can the methodology of this project provide a basis for creative and project-based architectural research, taking the discipline beyond the traditional areas of history, engineering, environment and economics?

As our application went on to explain, we intended to do this by engaging our students as researchers, and by complementing our project work with a rational process of design exercises and evaluations. For this we sought a sum of about £20,000 principally in order to find time for managing this fully, without the usual distractions of running modules and or exercising other academic duties, and also so that we could engage some new participants – for example, bringing construction or environment lecturers to play a part in activities at Longfield.

Our application was however ruled out on the grounds that we were not eligible to apply for this grant. We contacted the AHRC to find out why and were told that we could not apply because we were not architects – to which we responded that we were. This eventually brought a further reason, which was that although we were architects, we were not currently engaged in the design of a particular school and therefore we could not prove that this research would be of immediate use to us (although, in retrospect, it may well have been of use to our mentors, Jestico + Whiles). This information was conveyed by telephone and not in writing; it confirmed the view of our University's research office that the purpose of this type of grant is not yet fully resolved, even by the AHRC. This turn of events however illustrated to us the way in which architectural research is not fully understood by public grant-making bodies: it is not strictly practical, nor professional, nor academic, but a mixture of the three. It does not, in other words, tick the right boxes – and, to be supported publicly, the nature of design research must change to fit the boxes offered. This would not come as a surprise to any applicant who has to adopt a strategy to suit the current jargon of publicly financed initiatives, but we suggest that the current situation is problematic for architecture departments who want to work outside tested methodologies.

REPLANNING THE PROJECT FOR 2009

With the support of our Head of School we decided to relaunch the project in the new academic year taking on board our conclusions from the previous year. A revised project plan would enable us to put our conclusions to the test, thus ensuring that we could impose the rigour expected for our conclusions to have useful application.



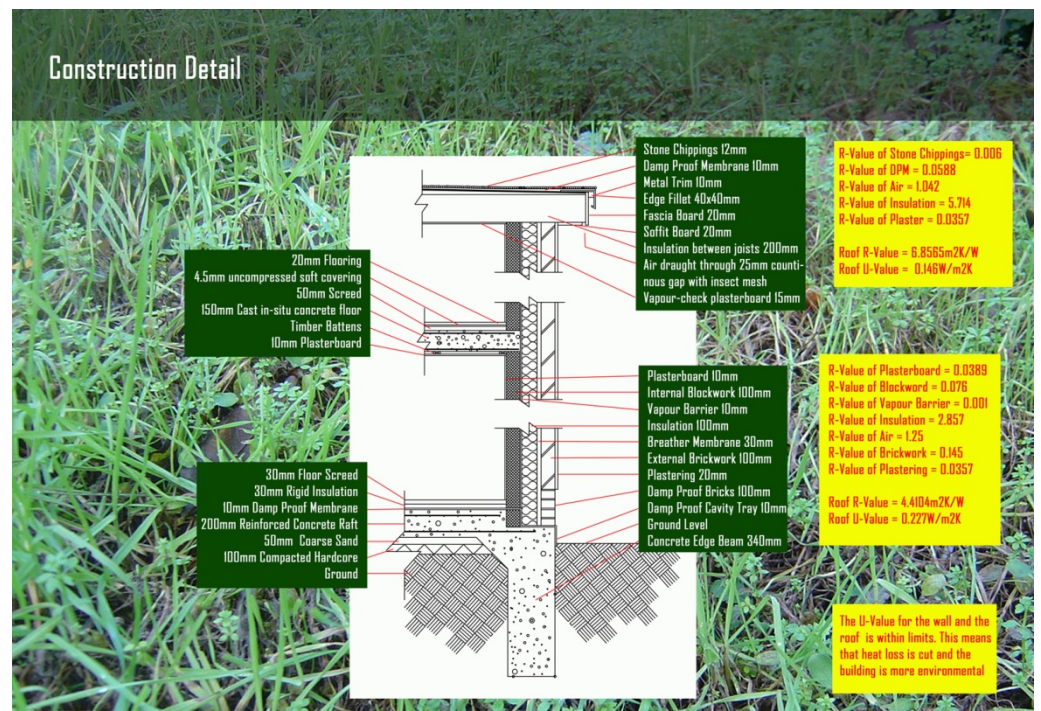
Louise Billingham, 3D Visualisation, autumn 2009

POLITICAL CHANGE

In one important respect the situation for student volunteers working on school premises was changing: the need for new vetting procedures before work could go ahead. The 'Vetting and Barring Scheme' that the government intended to launch on 12 October 2009 would have required all participating students and staff to register with the new Independent Safeguarding Authority before starting the project, even if they were to remain supervised during their time on school premises – rather than signing up with a simple identity check, as the List 99 system had permitted at the beginning of term. The scheme was to be, in the words of the Home Office, 'the most inclusive and largest system of its kind in the world', and public opposition to it resulted in a delay in its implementation (and, eventually, some compromise to its original sweeping nature).⁹ We found that during the course of the autumn term it was very difficult to get clear legal advice as what type of check students and staff would in fact have to undergo: in fact the principal at Longfield Academy, noting the considerable increase in bureaucratic activity that the new arrangements would entail for him and his staff, wrote to the University on 27 September to canvass their advice. At this time Longfield Academy had taken the view that it was not necessary for students and staff to have applied for a Criminal Records Bureau (CRB) check, which takes around a month to complete, because of the fact that they were continuously supervised by school staff on their fortnightly (at most) visits. The University took the view that the department would itself be best protected from for example complaints by parents if the checks were applied. It is worth

observing that in fact some of the students did have CRB checks because they had already worked as volunteers with children. We asked our new volunteers to apply for CRB checks; in the end these had not been fully completed even by the time the project ended. Up to this second running of the project in 2009 we had asked for student volunteers as the autumn term began; we would in future have to find volunteers by the end of the summer term, while students can still be found, in order for the checks to have been carried out by the time they return. We do not yet know how feasible this is.

During the stages of uncertainty which followed the public opposition to the original Vetting and Barring Scheme we contacted one of our members of parliament, Dr Stephen Ladyman, to express our concern regarding its implications for student projects. The point we made was that in general the government strongly supports outreach activities by universities, and yet the introduction of the Scheme as it then was would make such activities less likely to happen; a new tier of administration was to be added, with follow-on costs and delays. Dr Ladyman raised these concerns with Baroness Morgan of Drefelin, Parliamentary Under Secretary of State for Children, Young People and Families at the DCSF, who in her reply of 13 October 2009 stated that 'from November 2010, university students who begin volunteer work in schools will need to register with the [Independent Safeguarding Authority] if they are working on a frequent basis (3 or more days in a 30-year period or on an ongoing basis) or if they help supervise overnight trips'. This, in contrast with the original scheme, would appear to exclude students and staff from having to register so long as the programme for a school-based project followed the type of timetable we have used. The baroness also stressed that registration would be free for volunteers, and would also be considerably quicker than the old full CRB check procedure. At the time of writing it remains to be seen whether universities can in fact manage schemes on this basis.



Roope Elojärvi, technical detail, autumn 2009

SETTING UP THE SECOND PROJECT

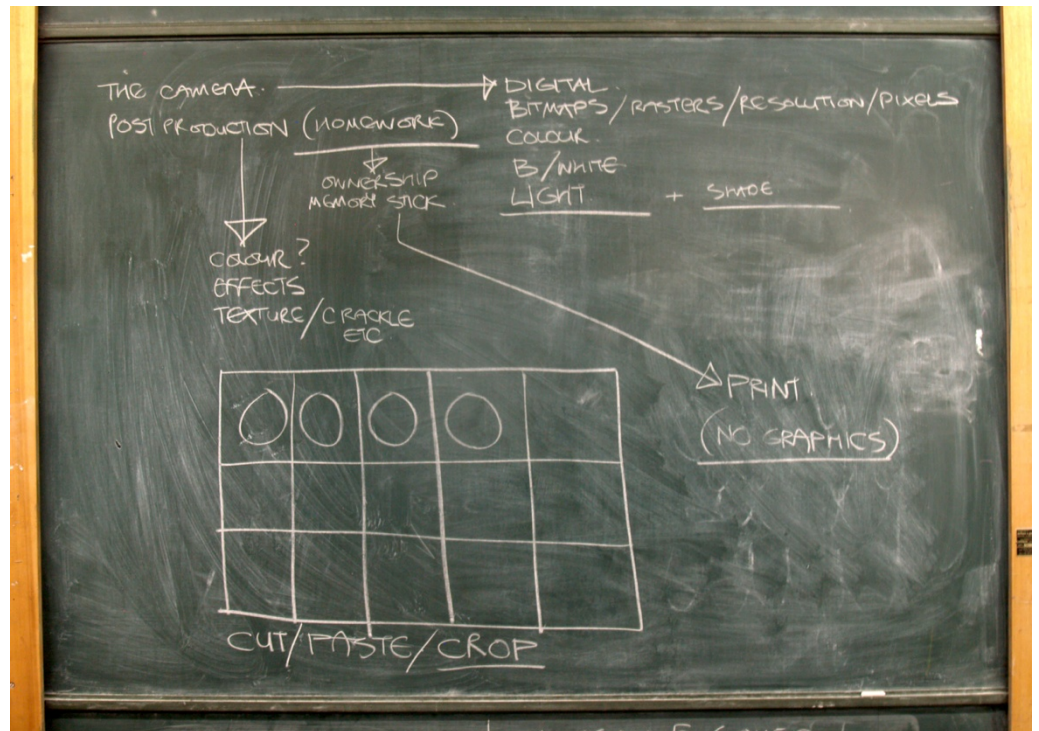
This new element apart, we reorganised our new project directly following the conclusions we had reached at the end of the previous academic year. Without now having to plan activities that coincided with those of the Sorrell Foundation Dylan Haughton was able more easily to plan and coordinate in advance a timetable that suited both KSA students and Longfield pupils. Secondly, the new project was to have a clearly defined brief that proposed the design of a distinct new building – a sports centre, which in fact had emerged as a stated need during conversations with pupils the year before. Thus its content was more readily definable than it had been and this directly addressed the major problem that the students had themselves identified; furthermore, Longfield pupils could themselves grasp the purpose of a new sports centre in a way that had been difficult for them the year before when we had tried to make incidental alterations to their existing buildings.

The new project was centred around six contact days between students and pupils:

- 1 site exploration
- 2 London study trip, exploring building precedents together
- 3 Brainstorming, sketching and modelling
- 4 Comparing and transferring ideas between students and pupils
- 5 Finishing three group models
- 6 Presenting work together

The brief for this project was issued in advance, just as it was for all other second-year architecture students at KSA (see Appendix Five). Dylan Haughton punctuated the process by issuing clear lesson plans (on the basis of the six contact events above) so that students knew specifically what it was that they had to do when they visited the school. These lesson plans are reproduced in Appendix Six. Finally, the role of the schoolchildren was itself more clearly defined: they were divided with the students into three consistent groups and attended to particular tasks. This time the participants were all 17-year olds, and members of a photography class.

‘Firmness, commodity and delight’ was adopted as a common theme for the first two contact days between students and pupils; ‘firmness’ for example, related to site surveying and investigations; ‘commodity’ to the practical requirements of the new brief; and ‘delight’ to colour and other sensations. Dividing the subject up in this simple traditional way enabled students and pupils to focus clearly on defining and answering particular questions. It was by continuing this theme for the London trip that we managed to keep the students and pupils focused in spite of the many potential distractions: for example, a questionnaire was prepared that encouraged pupils to photograph and record what they saw in a way that related to the overall themes of the project (see Appendix Seven). Brainstorming sessions at the school were made as enjoyable as possible with the groups preparing bubble diagrams and concept sketches from a wide collection of materials. On 17 December 2009, at the end of our term, the Longfield Academy pupils travelled to Canterbury and presented their group models to our entire second year in three five-minute presentations. They then joined our students for part of the latter’s final crit, watching their individual project presentations; they then toured the campus and concluded with lunch in one of our college dining halls.



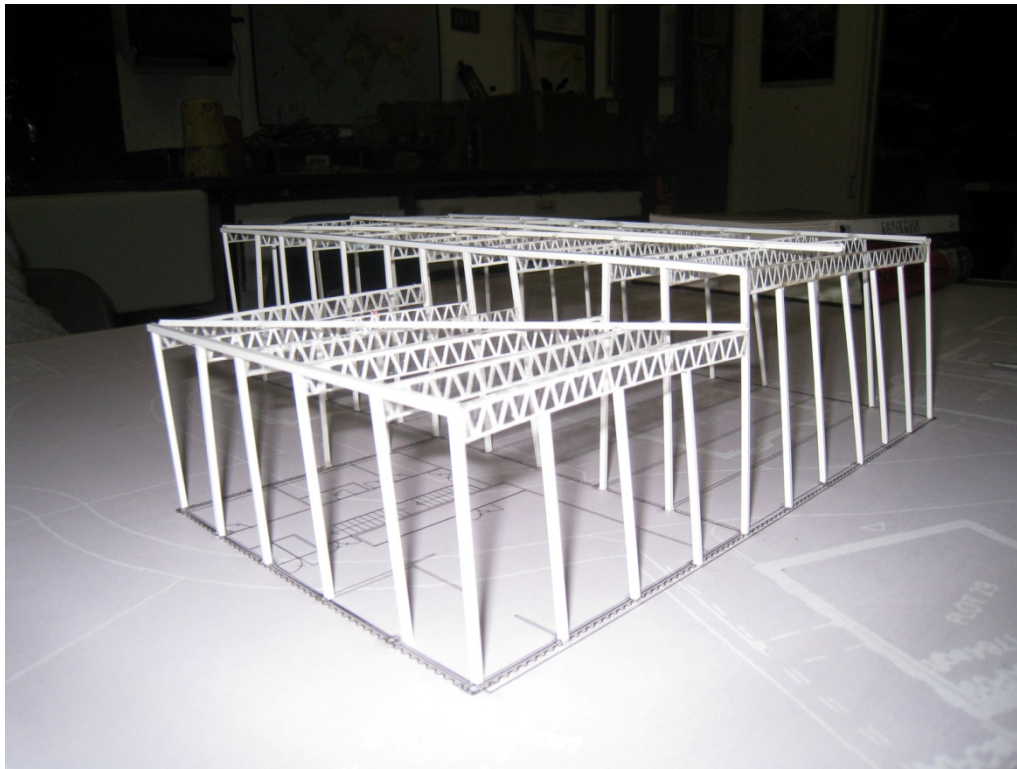
Communicating brief ideas with Longfield Academy photography pupils, autumn 2009

REVIEWING THE SECOND PROJECT

As can be seen from the description above, this second project integrated individual and group work around a common brief; it also defined more closely the interaction between Longfield Academy students and the pupils. The division into groups remained consistent across the project, and we established a dual-path project whereby students were aware that they were simultaneously undertaking 'simple' creative work with the pupils and 'complex' work of their own for assessment; the incentive for students to become engaged with the 'simple' work was that taking a demonstrably active and useful role in it could be rewarded in their final grade. The deliverables for each piece of work were clearly defined and provided a focus for sessions: in this respect the joint model building session (session 5) was particularly successful. By working to this programme and a clear set of objectives the students could see which areas of the design brief and process they had covered at any given point, and could thus compare their own progress with that of the other students in their year. The fact that the same pupils attended each session, were all studying photography and were all much the same age, contributed greatly to the cohesion of the project. In fact pupil expectation was more efficiently managed, because they all arrived at contact sessions knowing that that whatever events were offered, they would be able to develop and use their personal photography skills.

This timetable benefitted from the fact that there were fewer organisations with which to coordinate, and also enabled the Longfield students to work to a plan which coincided closely with that of their peers. Although that term there were no study trips abroad, the University had now instituted two 'reading weeks' when there was no scheduled teaching; getting over this complication required us again to ask our students to do a timetable 'swap' as they had the year before. The general term timetable had by now been revised to include special morning sessions on detailed aspects of building design – doors, windows and so on – and the

Longfield students were able to attend these as well as carry out both of the design exercises. This meant that they were able to feel more part of the year as a whole. The students this time made no complaints about the process and the experience, as they had done vocally the previous year; in fact the only point of friction, which was a short one, was that teachers at Longfield felt that some aspects of the London trip were 'above the heads' of the Academy participants – specifically, not targeted precisely enough at the expectations of their photography pupils. Dylan Haughton's summary comments were therefore much shorter this time, and are reproduced as Appendix Eight.



Student and pupil group model, autumn term 2009

SUMMARY: WHAT ARCHITECTURE STUDENTS AND SCHOOL PUPILS CAN DO FOR EACH OTHER

The range of experiences we underwent have contributed to a number of practical conclusions about how to operate in this field, as well as some broader suggestions about how projects of this kind can contribute to architectural education.

WORKING WITH AND COMMUNICATING ARCHITECTURE TO THE PUBLIC

We started from the assumption that an architecture school should demonstrate its public role by engaging with those in our region who are outside our profession but who might profit from collaborating with it. We discovered however that the overall pattern of interested groups and statutory bodies is very complex, and that some considerable coordination between all of these is required. The most obvious example of this is the current situation regarding registration with the Independent Safeguarding Authority, which is to date untested: the new process seems to us to have cost and time implications that have not yet been taken into account. We hope that our students will build a positive relationship with groups of pupils while we are carrying out joint work: that would suggest that students would indeed have to register, yet the law does not appear to require them to do so if the two sides are coming together only once or twice a month. We have also mentioned the situation regarding photographing school pupils: there is an evident conflict between working together on a project which is meant to be public, and hiding half of the participants from any record of an appearance in it. We discovered that we had to work out risk assessments anew for each case, and that as time goes by the apparent liability for the host department seems to grow as yet more 'risks' are uncovered and defined. On top of all of this, we found that the current mechanisms of grant-giving organisations such as the AHRC are inimical to this type of work because it mixes teaching with research. It is difficult for an architecture department and a primary or secondary school to deal with these problems on its own, and for the time being, at any rate, organisers of any similar project must be aware that they should face them early on during the planning stage.

It seems to us that for student-pupil projects to prosper some joined-up thinking is necessary; this would suggest a role for the RIBA as a recognised national lobbying group in issuing guidelines on the basis of coordination between the various statutory parties that make the situation clear regarding the points raised above. We believe in any case that the involvement of practising architects in architecture school-led projects of this kind, including for example the appointment of architect-mentors who themselves work in the field of school design, can only enhance the contemporary debate around the future design of schools. All these elements contribute to the professional, political and cultural *significance* of our project.

On a more positive note, the outcomes of the project – the work done by students, and indeed the contributions by the pupils in the form of drawings, models and photography, can provide a strong basis for an exhibition, publications, joint events and so on. Collaborative projects of this kind will give an added value to exhibited work: they will *communicate* to a public that is not always receptive to pure architectural design a sense that architecture is a necessary part of the public sphere; that exploring it with partners is challenging but

rewarding; and that it is accessible and enriching to all – even to children. Making work known to the community in this way is also way of raising interest in what architecture schools do, and that itself can be of specific value for the status of an architecture school within a university, not to mention any effect it may have on student recruitment. In the case of our project, we aim to communicate our findings through this work, but also by presenting our student work in the context of the National Schools Ideas Project.

ACTING IN OUR OWN INTERESTS

There is, then, a wider range of bodies that is necessarily involved with projects of this kind than might be obvious; and there are further organisations, such as charities and quangos, which could play a role. But as our Nottingham paper emphasised, an architectural school should primarily act in the interests of its own students, and we do not accept the argument, for example from the ARQ debate we have referred to above, that the success of a piece of architecture is measured on the basis of its advantage to other interest groups.

We sought to reinforce our students' interests by ensuring that end of term assessments would be identical to those for students in other design groups, but it emerged that this was not enough. In fact our students, in common it appears with students generally, look first at the 'outcomes' and then work backwards in order to achieve them. They then become anxious if it is not clear how to achieve this. In this way we perhaps fell ourselves into the trap of putting the ticking of boxes ahead of the broader educational experience we aimed at in the project. We cannot change the parameters of validation, but we are aware of the fact these parameters are under threat and indeed conversations continue about shortening the length of architecture courses and simplifying or reducing the number of assessed components in them. Our point is this: if collaborations such as those with schools are recognised as a vital element in architectural education, ways must be sought for refining the validation criteria which allow them to flourish. We value very highly the experience of our students and we are always looking for new ways of enhancing them; we have no doubt that as collaborations of this kind become more widespread and more sophisticated, the work that emerges will be increasingly *original* and valuable; furthermore, in devising collaborations that are right for them, architectural schools will be able to develop stronger identities. We also want to ensure that some of our best students continue to volunteer for collaborative projects.

The outstanding lesson to be drawn from the project has been that all sides must have a clear picture of what they want from it. That is generally not a problem for architecture schools; but it clearly is where other bodies are concerned. Working out shared goals with for example secondary schools requires a full conversation with those that teach in them, and a frankness about potential outcomes. Dylan Haughton has emphasised that this conversation must be a wide one: we noticed that school pupils had a clear expectation of what an art class was to consist of, and that was not necessarily met during our first year of the project; and of course school teachers too had expectations about our role in their school. On the other hand, while an architecture school may have a clear idea of what it intends to achieve through a collaboration, it does not automatically follow that a design tutor, especially an external one, will shares those expectations.

TIMETABLING AND COORDINATION

We make efforts to coordinate all the activities of our students across the school in ways that make it easier for them to learn from one another, and to find more than one set of experiences in each type of study we undertake; for example, we try to ensure that history and theory studies, in covering the subject of the historical development of new building types, coincide in the timetable with related design projects. We discovered during the course of our Longfield projects to date that the actual timetabling of collaborative projects is enormously complex – far more so than we had envisaged. We also found that the increasing standardisation of teaching and learning patterns across universities (for example, the introduction of ‘reading weeks’) made this coordination even more difficult. We have outlined above the principal elements that create this complexity, and intend to make architecture schools aware of them. In our experience students tend to react with concern to what looks like an irregular type of project timetable and, as standardisation increases, so more and more of what used to be done by architecture schools as a matter of course will be seen by them as ‘irregular’. It is important that this does not come at the cost of experimentation.

We noticed that staffing can be complicated – both for us, and for our partner school – and that many outside agencies are involved. Working with professional architects as mentors – the aspect of the project most consistently valued by students – proved so valuable that we would take it into account more thoroughly in any further execution of the project. Our mentors, Jestico + Whiles, were very generous with their time, but we cannot take this type of contribution for granted. All these practical problems need to be faced full on.

THE WIDER ROLE OF ARCHITECTURE SCHOOLS

Architecture schools like all principally-publicly funded institutions must demonstrate that they provide value for money. It is in the nature of architecture that this value may take many years, perhaps decades, to become evident; and even then it will be evident probably only in the general terms of a contribution to a society’s culture. In the shorter term an architecture school must show that it understands what an appreciation of buildings can offer to those not directly involved with architectural education, and that it can convey this to a wider audience. It must seek new allies wherever it can find them, and it should not limit this search by sticking to partners who themselves already understand what architects can do in terms of their own interests or of political expediency. In other words, architectural achievement should be measured in terms of what makes a building well planned, and pleasant and practical to live and work; at best, of course, it can be inspiring. There is no other profession or institution that has these priorities, but architecture. So that means that architecture schools should wherever possible emphasise these aspects of what they do, rather than looking for political initiatives to fulfil.

We know that an architecture school, like all public institutions, shares the public space with others. It is increasingly the institutions which do the most to share their own resources in a practical way that contribute most to the cultural richness of our society; all the pressures of daily life, whether cultural, social, political or economic, point that way. At the outset we looked for partners so that we could share these ambitions with others. The more aware an audience is of what a building can do, the higher public appreciation for architects will be. And the more this appreciation rises, the more opportunities architects will have to cultivate and

display them. So we see our task as one of developing a future audience of people who will be responsive to design in the built environment, and the roles of those engaged with it; maybe some of them will join our ranks. The most important thing for us was that the project should primarily be about sharing what we find exciting and moving in the built environment. Once we moved beyond the technicalities of the collaborative process and towards the design of a building we found that both our student and our pupil collaborators enjoyed the project more. It will be evident from this report that one of the major lessons for us is that student-pupil collaborations are too complicated to operate in the simple way that current slogans sometimes suggest. The critical thing, we believe, is to ensure that the simple fun of designing things well always remains at the centre of all of our activities: that will profit all of us. But remember always that it will take a complicated set of procedures to ensure that simplicity.

Appendix One: Second-year submission requirements and assessment criteria shared by all architecture students in autumn 2008.

Appendix Two: briefing points raised by Longfield Academy pupils in their sessions with architecture students and the Sorrell Foundation's 'common issues', autumn 2008.

Appendix Three: Dylan Haughton's summary report, August 2009.

Appendix Four: KSA's application to the AHRC for research funding (June 2009)

Appendix Five: Longfield Academy project brief, autumn 2009

Appendix Six: Lesson plans, autumn 2009

Appendix Seven: London trip itinerary and questionnaire

Appendix Eight: Dylan Haughton's summary report, April 2010.

Our participants

KSA students, autumn term 2008: Faiz Ahmad, Claire Allen, Ana Becheru, Ben Blackburn, Atakan Caglayan, Emma Craig, Daniel Domine, Natasha Fulcher, Luke Hazelwood, Lucy Healy, Toby Hoskin Parr, Ellie Lee, Matt Lippiatt, David Moore, Haroon Noon, Mariana Pereyra Pedrido, Rob Pollard, Sam Rigby, Lora Wilson.

KSA students, autumn term 2009: Oluwatoni Alebiosu; Louise Billingham; Amelia Calderon; Emma Clinton; Alissa El Assaad; Roope Elojärvi; Elizabeth Fleming; Sesen Ghezai; Sarah Harvey; Jamie Hissey; Lee Jesson; David Matthews; Emmanuella Sackey; Maria Skoutari; Hannah Tollinton; Phillipa Tranter.

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Notes

- [1] Timothy Brittain-Catlin, 'Look and Learn', *Architects' Journal*, 19 August 1981, pp 348-50.
- [2] Rory Olycato, 'Architecture schools too white in focus, says Prasad'; see <http://www.bdonline.co.uk/story.asp?sectioncode=426&storycode=3095814>
- [3] *Young Design Programme 2006-2007*, summary brochure published by the Sorrell Foundation, 2009, p 1.
- [4] <http://www.architecture.com/Files/RIBATrust/Education/2007/Validation/CriteriaForValidation.pdf>
- [5] <http://www.kent.ac.uk/aps/partnership-development/index.html>
- [6] Supporting, incidentally, a conjectural observation in Brittain-Catlin 1981.
- [7] See Doina Petrescu, Prue Chiles and 'The Agency', 'Agency: alternative practices and alternative worlds', in *Architectural Research Quarterly*, 13, 2009, pp 109-111.
- [8] Judi Loach and Zeynep Kezer, 'Architectural history at a crossroads: research challenges and opportunities', in the *Newsletter* of the Society of Architectural Historians of Great Britain, 96, Winter 2008/9.
- [9] http://www.crb.homeoffice.gov.uk/faqs/vetting_and_barring_scheme.aspx#whatis.

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX ONE

These were the instructions for submission and assessment for all second-year students on the completion of their design module at the end of the Autumn term 2008

List of work to be submitted:

1. A set of orthographic drawings at appropriate scales indicating scheme proposals. Building plans, sections and elevations must be drawn at scale of not smaller than 1:200 and must include reference to materials. You must include a drawing of the whole of the site up to its boundaries, showing access and landscaping at a reasonable scale.
2. Freehand drawings and computer images indicating material qualities, atmosphere of scheme, etc.
3. A design journal charting the development of your scheme and the influences on it, including a collection of relevant material as you have progressed through the module.
4. Models at various scales indicating massing of scheme, design idea and exploration of internal spaces.
5. Diagrammatic drawings and models showing scheme concept and organization.
6. A schedule of accommodation showing how you have provided the spaces given in your detailed brief.
7. Drawings, images and sketches prepared for the two design exercises.
8. Fire escape routes and distances between escapes.
9. 1:20 Wall section, showing construction including junctions with floors and roofs.
10. Axonometric/Isometric/Perspective detail of services/structure/construction integration both vertically and horizontally.
11. U-value calculations.
12. Artificial and daylight lighting proposals for a particular space.

In week 11 you will receive a second formative assessment of your work, enabling you to make improvements before submitting your portfolio. If the submitted portfolio is not complete, or not compiled in accordance with the submission and assessment requirements in this brief, you may be penalised by up to 10% in both the design and technical & environmental assessment categories.

Assessment timetable

Each design group will make and publicise its own arrangements for assessment, but this will in all cases include a mid-term formative assessment and a summative assessment based on work presented in week 11. Like all summative assessments this grade will remain provisional until the meeting of the examinations board at the end of the academic session.

Assessment guidelines

Outline:

The work submitted for summative assessment in your portfolio must include a series of finished sheets which are correctly labelled, without spelling mistakes, and which can be understood without further explanation. They must be bound, in A3 format, and form a coherent set and be presented at a scale which best represents your design intentions. They can include written texts or other forms of presentation. You may reduce the number of overall drawings or models presented by combining submission requirements so that for example a three-dimensional concept model also conveys environmental or constructional information.

You can draw by hand or by using a computer, but the quality of the finished work will be taken into account, as will the capacity of your chosen medium to convey your ideas. That means that you will be penalised if your ability to use a computer is not good enough to express your proposal to its best advantage. In particular, if you use a computer assessors will be looking to see whether you are using it as a tool, or whether you letting it compromise your design because of your inability to master the software. In the case of the latter you will be marked down.

Don't forget, however, that you can mix the use of the computer with other media. For example, if you are unsatisfied with the quality of a computer render, you could print out a wireframe and colour it in yourself. We will welcome and reward a variety of drawing methods.

You are reminded again that printer failure is *never* an acceptable excuse for late work.

The purpose of the design journal is to demonstrate not only your ideas but also your changing response to the project and its challenges. You should include in it any material you have found interesting and informative in relation to your design process. Your journal will also record the development and changes made to your designs as the result of tutorials and crits.

Assessment criteria

Feedback sheets for formative and summative assessment will grade you on the basis of the following assessment criteria for design proposals:

- 1 Has the student presented all the required finished drawings?
- 2 Do the drawings represent a coherent scheme which reflects the student's engagement with the brief and with his / her tutor?
- 3 Does the scheme provide the required accommodation specified in the detailed brief?
- 4 Are the drawings and other media coherently presented in accordance with the assessment guidelines?

- 5 Are the finished drawings and other media executed to a high standard?
- 7 Your construction details will demonstrate an understanding of construction techniques, and use appropriate materials, bearing in mind economy, function and environmental impact.
- 8 Your designs will demonstrate an understanding of the requirements of fire regulations and other relevant legislation.
- 9 Your lighting studies will demonstrate an understanding of the size and distribution of openings required to provide a well daylit interior.

Component weightings

You will receive separate percentage marks for design, and for environment and technology. The submission of a complete portfolio will account for 10% for both of these separate percentage marks. You have to pass both the design and the environment and technology components in order to pass the module as a whole.

Your percentage grade for design will then account for 80% of your final grade, and your percentage grade for environment & technology will account for the remaining 20%.

Timetable, Autumn term 2008

Week	Day/Date	Time	Event	Staff	
1	Thursday 2 nd October	9.00	Introduction in GLT2		
		15.30	Site visit		
2	Wednesday 8 th October	10.00	Technology and environment		
		Thursday 9 th October	9.00	Group meeting: first analysis of site. First design exercise: associations	
3	Wednesday 15 th October	10.00	Studio tutorials		
		10.00	Technology and environment		
		Thursday 16 th October	9.00	Group meeting	
		10.00	Studio tutorials		
4	FIELD TRIPS				
5	Wednesday 29 th October	10.00	Technology and environment		
		Thursday 30 th October	9.00	Group meeting	
6	Wednesday 5 th November	10.00	Review of design exercise		
		10.00	Technology and environment		
		Thursday 6 th November	10.00	Introduction to second design exercise: disciplines	

7	Wednesday 12 th November	10.00	Technology and environment	
	Thursday 13 th November	9.00	Formative assessment (intercrit)	
8	Wednesday 19 th November	10.00	Technology and environment - tutorials	
	Thursday 20 th November	9.00	Group meeting	
		10.00	Studio tutorials	
9	Wednesday 26 th November	10.00	Technology and environment - tutorials	
	Thursday 27 th November	9.00	Group meeting: analysis of second design exercise	
		10.00	Studio tutorials	
10	Wednesday 3 rd November	10.00	Technology and environment – tutorials	
	Thursday 4 th November	9.00	Group meeting	
		10.00	Studio tutorials	
11	Wednesday 10 th December	10.00	Technology and environment – tutorials	
	Thursday 11 th December	9.00	Group meeting and penultimate formative assessment in Eliot dining hall	
12	Friday 19 th December	17.00	Portfolio submission deadline	

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX TWO

This is the list of points raised by Longfield Academy pupils at their first meeting with our students:

1) Space

- the canteen is too small
- the corridors are too narrow
- the art rooms are too small
- the library is too small
- there are wasted spaces
- the school feels small because of wooden fences

2) Layout

- there is not enough outside seating – especially “up the top”
- the toilets are too centralised
- the vehicle access is confusing – the coach park is remote
- the common areas are not well linked
- there are no lockers, no safe places to put stuff
- there is no colour or material or clarity
- there is no gallery area to display work

3) Technical Issues

- it is too hot or too cold – open up areas to south
- the corridors echo
- the toilets are not sound proof
- there is no outside shelter by the doors
- we can hear noise from the trains

4) Look & Feel

- not enough natural light
- the windows are too high
- the slope of the land looks bad
- there is too much glazing
- the buildings are too square
- we don't like the blue
- the buildings are too 70's
- the DT building feels temporary
- the seating areas are boring

5) Security (from the head)

- surveillance difficult
- easy to wander off

6) Other points

- Which rooms are “wasted” or not used to full potential?
- Why are they rebuilding the school?
- Where are all the toilets?
- Where are all the subject areas
- What do they mean by “toilets are too centralised”? Is this a maintenance issue?
- Toilet passes? Are toilets locked at certain times of day? Split by year group?
- Do the kids want whole school events? Are JW including a whole school space
- Where do the children enter the school in the morning?

This is the list of points raised by Longfield Academy pupils at their second meeting with our students:

Toilets

BIG MIRRORS INAPPROPRIATE MIRRORS
NO BRIGHT COLOURS
NO MIRRORS IN BOYS PLEASE
TOO SMALL NOT ENOUGH MIRRORS
MORE RUBBISH BINS
SMOKING PROBLEM
MAKE THEM BIGGER
PAINT THEM PINK WITH BRIGHT/MURALS
A GRAFITTI WALL
MORE CLEANING CHECKS

Receptions

NICE RECEPTION
IT'S CLEAN AND TIDY
COMFY SEATS
PLASMA SCREENS
NOT ENOUGH STUDENT WORK
CALMING, WELL SIGNED AND GOOD
IMPRESSION OF SCHOOL

Social spaces

COMPUTER CAFÉ GOOD, WEBSITES BLOCKED
LIBRARY SPACE AND COURT YARD GOOD
NO SEATING AT TOP QUADS OR OUTDOORS
GENERALLY

CLUBS AT LUNCHTIME WOULD BE GOOD
CAMERAS GOOD
LITTLE AREAS AROUND SCHOOL WOULD BE
NICE
AREAS DETERMINED BY YEAR WOULD BE
GOOD
MORE SEATING!!!!
MORE COMFY AREAS WITH SOFAS
UVA LIGHTING

Communication

BAD COM'N IN SCHOOL BETWEEN TEACHERS
SIGNS FADED
ENGLISH/MATHS ON SAME LEVEL, HARD TO
FIND
BETTER USE E MAILS/INTERNET
INDIVIDUAL E MAIL; ACCOUNTS

NEW SIGNS

DISTINGUISHED BLOCKS

Sustainability

RECYCLING BINS?
USE THE SPECTRUM CENTRE AND THE
FARM
SPORTS HALL ROOF LEAKS
WIND AND SOLAR POWER
IT'S TOO HOT
SWITCH OFF THE LIGHTS
BIKE SHED, SECURE RACKS VISIBLE FROM
ROAD
RECYCLE THE RAIN WATER

General points ('Common issues') raised by the Sorrell Foundation:

- Colour
- Communication
- Dinner Halls
- Furniture
- Inclusion
- Learning Spaces
- Receptions
- Reputation and Identity

- Safety and Security
- Sixth –Form Spaces
- Social spaces
- Storage
- Sustainability
- Toilets
- Uniform

This is the list of points raised by Longfield Academy pupils at their third meeting with our students:

Architectural Issues we discussed

- The site and the external areas
- The teaching structure of the school
- The general arrangement/layout

11. All of the years have their own tree where they gather in the field and the children like this. They want some things to be by year and not always by house.

Specific pupil points

1. My mum keeps crashing into the bus
2. We want lockers for our houses but we want to choose whose lockers are next to whose so we can be with our friends
3. The corridors are too narrow but only in certain places
4. We can't go on the grass when it rains
5. We all have to crowd into the library when it rains and its too hot
6. Girls don't do sports on the grass
7. Girls and boys don't mix for sports, girls go up the top.
8. My favourite place is outside the canteen up the top.
9. Its good there are different entrances onto the site
10. We should do some things in houses and some things all together so we can see our friends in different houses.

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX THREE

Feedback Report 2008-9: Dylan Haughton

Introduction

I am an architect practising in central London and have worked as a sessional tutor for the University of Kent for 10-20 days per year during 2007, 2008 and 2009 in the first and second year programmes. I was approached by the School of Architecture at the beginning of the autumn term 2008 to help with a project involving the University, Longfield Academy in Kent and the Sorrell Foundation in a joint architecture project.

Participants

The Sorrell Foundation (the Foundation)

The Foundation is a charity based in London and part of their work is to promote engagement and interest in design amongst young people. One of the ways they do this is through their Young Designers Programme which seeks to enable dialogue and create a framework for vertical links between secondary education, tertiary education and, through a process of mentoring, industry. This is done in the context of the Building Schools for the Future programme, the largest UK school building programme since the Victorian era.

Longfield Academy (the Academy)

The school is in a small town in Kent near to Rochester, the school buildings are in a poor state of repair; the site has many systemic problems. The school is currently in the process of commissioning the design of a new set of buildings through the Building Schools for the future programme and aim to move to new building on the neighbouring site when they complete.

University of Kent School of Architecture (KSA)

The school of architecture is based on the campus in Canterbury and runs a project at the beginning of second year called Adapt and Extend that seeks to introduce students to some of the issues around adapting and extending existing buildings for re-use. The problematic buildings at Longfield Academy were seen as a good vehicle for this project and an opportunity for a group of second years to engage with a real client and a real set of problems.

What worked and what didn't work

1. The Programme

Part of my job was to manage the programme of events and I produced a schedule to bring together the three institutions at the key stages. The Foundation have a process that is listed first and was adapted to fit with the school's term which is listed second. The dates for the visits were then shifted to fit with the Academy's two week rolling timetable. I was brought on board on the 10th of October after the first visit had been made and the Foundation made their first visit to the school to introduce their process shortly after. Clearly it would have been advantageous if the key staff from the three institutions could have met before the start of term to agree the programme and the brief, if the school of architecture study trip could be timed to co-incide with the Academy's half term then two visits to the academy could be made before the break along with the Foundation's scheme launch day (students only) and challenge day (students and pupils) in London. The school's intermediate crit could then have coincided in the same week as the Foundation's concept presentation and the celebration day could have been in week 11 of the term, between the student's final crit and their hand in, instead of being bumped to January. Commitments mount up for all concerned in week 12 and this time is best left free. This arrangement would give the architecture students a clear window to draw up their concepts in the second half of the term.

The programme worked well and held together until week 10 of the term when a lack of initial planning and co-ordination became clear. There was a lack of commitment from the students to attend the London visit on the 4th of December, the second mentor visit was cancelled and only two of the 19 students attended the Foundation's scheme launch. Feedback from students suggests that they did not see the launch as relevant to them, despite the opportunity to meet students from all over the country. They were at this stage concentrating on drawing up their work and producing material for their hand ins in week 12. The Foundation were running the bulk of the young designer programme in the spring term and had adapted their input to pilot the project with the school in the autumn term. This mis-match in the institutional programmes put pressure on all concerned, led to some tensions and most probably contributed to the withdrawal of the Foundation from the project in week 11. The withdrawal was disappointing for myself; the Foundation had been supportive, created a framework and offered valuable input up to this point. The school proceeded with the final crits and as mentioned the celebration day was held in Canterbury on February the 6th.

Group Working

The foundation framework suggests that groups of 5-6 pupils form a client team and groups of 5-6 students from a design team to deliver the work. This is a great ambition and helps prepare students and pupils for real work situations. KSA, however, required the architecture students to have individual outcomes and assessments for their work and while a certain amount of group working could take place in the briefing phase this broke down in the delivery stage. The Academy has a two week rolling timetable and while the pupils that the students were engaging with were in groups, those groups changed week to week and so there was a lack of continuity and the client team/design team relationships did not develop. Strong personalities within the pupil group came to fore and took the lead in this situation.

The pupil training day at KSA with the Foundation did not take place as it co-incided closely with the challenge day, as mentioned above the slow start and holidays meant that many events were compressed into week 6. The pupils' role as clients took time to develop and the academy staff became concerned

about what the pupils were actually learning. We tried to encourage the pupils to fulfill their role as clients by encouraging them to analyze the school layout by tracing movement patterns on plans of the school and then roughly modeling potential new spaces as a result. The pupils enjoyed this approach and developing the brief through drawings and models is an interesting alternative to purely verbal and written communication.

The Brief

The development of the brief went through many cycles, again, the slow start caused confusion and strong ideas came out of the first site visit before the Foundation or I became involved. The Foundation have a number of common issues around which they encourage groups to work in formulating ideas, this provides a good framework for pupils to work within but did not encourage the students or the pupils to look at some of the more systemic problems that the school has, such as its relationship with its site, the arrangement of the school buildings generally and the organization of the school as a social structure. Architectural training involves taking an overview even if proposals become localized and the students were encouraged to re-state the brief in these wider schematic terms along with the common issues identified by the Foundation when considering proposals to adapt and extend the school buildings.

The aspirations and outcomes for the pupils were less clear. The project was led by the art department at the Academy and framed within this activity; this accorded well with developing design skills, spatial awareness etc. and working alongside the architecture students helped some of this to happen, with some pupils displaying alarmingly good awareness and insight. The Foundation's framework, however, identifies the pupils as the clients, whose role is to brief and perhaps learn to manage the student designers, in reality the pupils did not think in these terms and to my view is that they were expecting to be primarily creative themselves, which is reasonable given that they were attending their art class.

An issue for both students and pupils was the reality that the school is being re-designed globally and will be demolished and replaced in reality, and, while both groups were intelligent enough to be able to suspend their belief and imagine a situation where the existing school might be retained, this reality dampened the enthusiasm that would have been there had the schools real brief for its buildings been to adapt and extend them.

The Mentor

We needed to find a suitable mentor for the architecture students and it was suggested we contact Hines Richardson a director at Jestico + Whiles Architects. We organized a group visit for the students in week 6 and their insight into school design and the design of learning spaces was invaluable and inspired the students to engage more fully with their task. They are also, co-incidentally, the architects for the new Longfield Academy and showed us their proposals for the new buildings next door and in doing so it became clear they had engaged closely with educationalists and teachers along with the pupils. We took this on board and invited a former educationalist and head teacher to the interim crit the next week. We also encouraged the students to analyze the learning model at Longfield more closely and quiz the pupils about it, cross year issues, territory, pros and cons of the house system etc. It would be better to engage with the mentor in week 2 or 3 and perhaps then invite them to the interim crit or a mid term tutorial in week 7 or 8 for the second session. It would also be useful for students to engage with the teachers and support staff in a separate session from the pupils.

Celebration Day

As mentioned the programme slipped at the end of term and the concept presentation and celebration were moved to the 6th of February allowing the pupils to visit the University and students to present their work in public to a large group, 6 students were selected to present using power point which while nerve racking was great experience. Food, a spaghetti bridge building competition in the studio and a tour of the campus took place afterwards. The day was positive and an important chance to close off the project on a good note.

Conclusions

- It's vital that all contributors be prepared for the start of term and have as clear an idea of the programme, timing of key events and aspirations as possible at the outset.
- A high level of co-operation is required from all contributors, the occasional imperfection needs to be accepted and overly prescriptive approaches will not help.
- Working in clear groups is a way to make the project manageable given the numbers involved, changes of location etc. and the institutions should attempt to make this happen.
- It may be better to tailor the brief to the reality on the ground to a greater extent.
- Enormous mutual benefit resulted from the collaboration.

Dylan Haughton RIBA.

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX FOUR

AHRC application
Research grant – practice-led and applied route

Case for support (submitted June 2009)

Project title:

Evaluating young user engagement in school design

Timothy Brittain-Catlin

Overview

The government's 'Building Schools for the Future' programme continues to cause considerable controversy, and new buildings are sometimes accused of failing to meet the expectations of users – or designers. While public discourse in the visual arts generally gives priority to projects which have a broad sense of inclusivity, this logic has not been extended to involving pupils themselves in school building programmes. This project pilots techniques for wider study in this field by investigating the design awareness of school users themselves and tests whether this form of user engagement results in designs that meet the needs and aspirations of pupils. A number of 'client groups' of school pupils will work with the University of Kent's School of Architecture on briefs relating to an extension or alteration at their own school - with design content meeting the relevant Royal Institute of British Architects standards. This highly structured and intensive process will be closely documented and evaluated in order to understand the ways in which this form of user engagement can be managed and add to the school design process.

This work follows on from a pilot scheme undertaken at the Kent School of Architecture at the start of this current year; findings from this new project will be submitted to the National School Ideas Project, managed by ASD Projects of London Metropolitan University. This is an initiative of the Department of Communities, Schools and Families together with the Royal Institute of British Architects; we anticipate that our findings should therefore be published and promoted in their planned final document. Its outcome can be also disseminated through a number of different media, from articles in architecture, social policy and education journals to the larger circulation newspapers aimed at readers from these professional fields; it could also supply case study material.

Research Questions

- 1) Could a more engaged design process resolve issues endemic in the government's school building programme?
- 2) Can this process help capture pupil's own priorities in school design and provide guidance on how to enhance user appreciation of the school environment?
- 3) How does engaging with social processes, institutional agendas and public policy affect the architect's design process?
- 4) Can the methodology of this project provide a basis for creative and project-based architectural research, taking the discipline beyond the traditional areas of history, engineering, environment and economics

Research Context

Questions such as the above are raised regularly in the professional press, for example in the journal *Building design* which is read widely in the architectural and architectural teaching professions. To date, however, no research has been attempted which aims to provide any evidence-based answers.

The result is that architects as designers are frequently caught on the back foot, and are unable to fulfil their potential as contributors to a broader social debate. One specific example is the current state of the government's 'Building Schools for the Future' programme, which aims to rebuild or revitalise a large proportion of educational buildings across England. The programme has caused considerable controversy, usually either where high quality existing buildings have been demolished (such as in the case of the 1870s London School Board premises, many of which were fit for purpose), or because new buildings have failed to meet the expectations of users – or designers. In general, public discourse in the visual arts gives priority to projects which have a broad sense of inclusivity or impact; there is thus a need for a research programme which will allow a focus on these areas.

The contribution this project, the first of this kind involving a professional validated school of architecture, could make to this debate is quantifiable on a number of grounds:

- 5) to architectural professions: it can highlight the benefits of an engaged design process.
- 6) to school managers and educators: it can quantify areas of interest and importance in school design that are important to the pupils themselves, and can enhance their own appreciation of the school environment
- 7) to architectural theorists and historians: it can illustrate the ways in which engaging with social processes, institutional agendas and public policy (such as the requirement to be more responsive to the needs of users in public buildings) can affect – and can historically have affected – the architect's design process.
- 8) to architecture school teachers: it can enable a rationalisation of the design process and emphasise key aspects of design development, and thus contribute to the way in which architectural research can be creative and project / design-

based, rather than being restricted to the traditional areas of history, engineering, environment and economics; it can also provide a model for future collaborative projects of all kinds

This project is not primarily a pedagogic one, but inevitably it will have positive impact on those engaged in education as users:

- 9) to school pupils: it can provide an introduction to the importance of the design process as a problem solving method, as well as the key to greater engagement with the visual arts.
- 10) to architecture students: it can enhance the experience of designing through interaction with a complex and demanding 'client'.

Research methods

This project is practice led, and the primary means of reaching conclusions will be through the practice itself and the subsequent analysis of it.

The methodology will be as follows: a programme of field research will be established using a group of volunteer researchers (drawn from second-year architecture undergraduates) which will run parallel chronologically to the mainstream design module of their peers during the course of the autumn term 2009. This group, consisting of eight researchers, will be allocated to a secondary school in the vicinity of the university. The group will be asked to define and execute the design of an extension or alteration to the school's buildings or its open environment during the course of the 12-week term. This definition and execution will be arrived at through continuous consultation with a group of school pupils, chosen by the school, and will take place mainly over day-long weekly sessions. The content of the design work will meet the criteria demanded from schools by the validating Royal Institute of British Architects.

The term's activities will be punctuated by a series of planned events. Some of these will be participatory design sessions with both students and pupils run by design teachers from the architecture school. Others will be talks by specialist lecturers addressing areas of architecture beyond the aesthetics or functions of design – for example sustainability and local sourcing; construction; and historical talks about local buildings – in order to inform the users.

At the end of the term, the students will complete their design projects and present them to the school pupils. All parties will be asked to evaluate the experience, in particular highlighting the areas where they felt the collaboration was valuable or inhibitory. The designs will be exhibited both at the schools and at a central location nationally. Equally significantly, the students will present their work in the form of drawings, models or other media to an audience of pupils from the whole of the school concerned, and will also present them to school governors and managers.

All teachers participating in the project will likewise evaluate the experience. They will be asked in particular how the collaboration *itself* had caused them to re-evaluate aspects of

the design process, or of the technical or critical analysis they demonstrate in their teaching. They will also be asked to summarise their experience in writing.

This project follows on from a pilot project that I ran at the Kent School of Architecture in the Autumn term 2009. In this project undergraduate researchers carried out a design project together with pupils from Longfield Academy in West Kent, using at first a pattern of practice derived from that devised by the Sorrell Foundation, a charity which promotes art and design in schools. We have evaluated that pilot in some detail, and we (and the staff and pupils of Longfield Academy) are now ready to develop it into a full research project.

Project management

I as principal investigator shall be responsible for organising the timetable of the project. After the 12-week project execution period I shall call in the reports of the participants and analyse the evaluations; this process will take two months. Immediately thereafter I shall be responsible for creating the documentation which will record the outcome of the research. The project will thus run from September 2009-Easter 2010.

An experienced design tutor will act as research associate and will direct the activities of the researcher-school group.

Since my own historical research describes the changing professional world of the architect in response to social pressures, this work has intrinsic value to me.

Dissemination and knowledge transfer

It is clear from the section 'context' above that the results of the research can and should be disseminated in a variety of ways and can potentially reach a wide academic and professional audience. Directly, this research will be submitted to the National School Ideas project (see overview, page 1) and should thus be published during 2010-1 by the DCSF and the RIBA. In addition, this applicant has already started to write on this subject (in the current number of *Architecture Research Quarterly*) and on that basis was immediately invited to submit an abstract on the subject to the forthcoming Ethics and the Built Environment Conference (University of Nottingham / University of Adelaide). There is evidently some thirst for research in this area.

To this can be added that I have noted that my own area of historical research has covered periods of change in architectural and design practice; by theorising or rationalising the outcomes of the project it will be possible to cast light on the ways in which architects have historically reacted to unusual social or practical pressures; thus the research outcome could form the basis of a theoretical, historical inquiry into architectural method. It will in any case be highly relevant in any analysis of periods in which school design itself has been reconsidered, or when political priorities have enlisted architects for social purposes.

It is possible however to reach conclusions which will have a broader interest base, and which would find an audience in the readership of influential and large-circulation professional periodicals such as *Building design*, since they will have clear implications for

practical decisions both in the design of schools, and in the process itself of school design. These conclusions will find a ready response in the related fields of education and social policy, and could potentially provide the catalyst for further research there. In addition, by virtues of the research method, the research outcome is likely to indicate that collaboration between students and pupils can enhance the appeal and inclusivity of university architecture schools towards local schoolchildren; quantified information on this will find a broad and appreciative audience among politicians and professional activists.

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX FIVE

Project brief for AR529: Adapt & Extend (Longfield Academy version)

AR529

UNIVERSITY
of
KENT
SCHOOL
of
ARCHITECTURE



Adapt & Extend: Longfield

Module Convenor: Dr Timothy Brittain-Catlin
t.j.brittain-catlin@kent.ac.uk
Tutor: Dylan Haughton

STAGE 2
ARCHITECTURE &
INT. ARCHITECTURE

09:10

STAGE TWO

KENT SCHOOL OF ARCHITECTURE

BA (Hons) Architecture/ Interior Architecture

AR529 Adapt and Extend: Stage Two Autumn Term 2009-2010 - Longfield

Module Convenor: **Dr Timothy Brittain-Catlin**

Tutor: **Dylan Haughton.**

The project

This year the Longfield project will focus on the provision of a new sports building for the school. The existing school is scheduled for demolition and a new school has been designed for the site next door. The school has however an enormous steel framed gym and we are proposing a scenario whereby the school re-use this structure and link it to the new school and the town for use by the whole community in accordance with the master-plan given with this brief. The steel frame can be adapted and extended but must be clearly serving a purpose in the final proposal.

The project involves working alongside 3 groups of school children from the school who will be building large-scale models of the gym for their art class as an 'architecture project. They will need our help to do this; it will help them to develop three-dimensional awareness and to think laterally. They are in the midst of their school experience and are potential end-users of your building so for you they will be a useful source of ideas and information that will add to the credibility of your project. We will visit the school three times so you will get a lot of time at the site. Interacting with the pupils at the school is an important part of this project, and we will carry out specific exercises to encourage you do this.

We will also spend a day visiting some sports buildings in London and visiting the office of a leading sports architect. Understanding the existing structure and how to modify it will be important, so we will focus the week 5 tutorial day on structure and bring in a structural engineer to look at our proposals.

I am a practicing architect and so I will encourage you to work in a professional way as that is all I know, creativity is also essential. We are working with others and so you will need to buy into the programme and turn up for the events.

Dylan Haughton

Module Learning Outcomes: refer to

<http://www.kent.ac.uk/human/modulespecs/Architecture/ArchStage2Modules/adaptExtendmerged.doc>

The project

Your scheme should include the following accommodation.

- A multi-use gym and storage area that can be used for a clearly defined set of gym based sports, you will identify the relevant sports through consultation with the school children and town residents
- A 25m training pool
- A studio space for relaxation and floor based exercise
- Male and Female Changing rooms with locker, toilet and shower areas for the above
- An entrance area with a small café, reception and management office
- A plant room
- Car and cycle parking
- You should also provide links to the outdoor space in order that activities can be carried outside.

The key to this project is the design of the following:

- The integration of your scheme into its site and context
- Spaces that are atmospheric as well as functional and reflect the concerns and desires of the pupils
- A clearly organized, elegant plan and section
- The successful integration the existing structure into your scheme
- The strategy for re-cladding, re-roofing and glazing the building
- Integration of your environmental design into your building overall
- What you learned from your interaction with the pupils of the school, in order to show your reaction to 'real' client pressures and interests and how this information was integrated into your own design.

The assessment of your scheme will take these key aspects into account:

- Retention of the existing sports hall structure
- Links with the new School buildings next door
- Links with the town
- Relationship with the proposed housing scheme on the site of the existing school

How the module will be run

On Monday 28th September Dylan will give an introduction to the project in the lobby of Grimond and will finalise the participation list.

On Thursday 1st October you will visit the school for the first time. Your train fares to Longfield will be refunded by us –so please ensure that you have receipts (a credit card voucher is not enough). On some occasions you should be able to travel cheaper if you buy your tickets in group of four.

There will be four visits to Longfield Academy in total and you will be working in groups during the morning sessions to develop a group project with the pupils there. You will also develop individual work in the normal manner. The process of working in groups with the pupils should feed and enrich your own designs.

There will be a study visit in week three to a sports complex and an architect's office.

The final crit in week 12 is the summative assessment. As we are working with sixth formers we are going to invite them to the crit to make a short joint presentation of the work of the 3 groups for assessment before the main crit. This visit will also allow them an opportunity to look around the university and to take part in the crits in a mature way.

Some events will be shared with the rest of Stage 2 – this includes some of the 9am talks, and the intercrit and crit events.

You'll be assessed in terms of what this project expects of you – so don't worry if you see other Stage 2 people doing things differently. In fact the actual submission requirements are very similar, and the overall module requirements are identical.

Module Timetable

Always check the timetable for further details, including the location of events, and always check the WebCT site for announcements about timetable changes on the morning of the event.

Week	Day/Date	Time	Event
1	Monday 28 th September		Introduction to Project and brief
	Wednesday 30 th September	12.00	Introduction to surveying with Chris Gardner
	Thursday 1 st October	9.00 to 16.00	Longfield – Visit 1 Information gathering, Forming 3 groups
2	Wednesday 7 th October	10.00	Technology and environment
	Thursday 8 th October	9.00 to 10.00	Group/Year meeting: introduction to 1st design exercise with Tim
	Thursday 8 th October	10.00 -17.00	Tutorials in Canterbury the site, the brief, first ideas
3	Wednesday 14 th October	10.00	Technology and environment
	Thursday 15 th October	10.00 -17.00	Group ABC tutorials in Canterbury Ideas and Concepts
4	Wednesday 21 st October	10.00	Technology and environment
	Thursday 22 nd October	All day	Study Trip
5	Wednesday 28 th October	10.00	Technology and environment
	Thursday 29 th October	09.00 - 10.00	Group/Year meeting: review 1st exercise introduction to 2 nd with Tim
	Thursday 29 th October	10.00 - 17.00	Tutorials in Canterbury Sketch Model and Sketch scheme
6	Thursday 5 th November	09.00 - 12.30	Longfield – Visit 2 Brainstorming, sketching and modeling in 3 groups
	Thursday 5 th November	13.30 - 16.30	Tutorials in Longfield Group A only
7	Wednesday 11 th November	10.00	Technology and environment
	Thursday 12 th November	09.00 onwards	Formative assessment / Interim Crit Eliot dining hall
8	Wednesday 18 th November	09.00 to 12.30	Technology and environment - tutorials
	Thursday 19 th November	09.00 to 12.30	Longfield – Visit 3 A free transfer of Ideas, group consensus
	Thursday 19 th November	13.30 - 16.30	Tutorials in Longfield Group B only

9	Wednesday 25 th November	10.00	Technology and environment - tutorials
	Thursday 26 th November	09.00 - 10.00	Group meeting: presentation of second design exercise with Tim
	Thursday 26 th November	10.00 – 17.00	Tutorials in Canterbury Presentation strategy
10	Wednesday 2 nd December	10.00	Technology and environment – tutorials
	Thursday 3 rd December	09.00 to 12.30	Longfield - Visit 4 Finishing and presenting the group work
	Thursday 3 rd December	13.30 - 16.30	Tutorials in Longfield Group C only
11	READING WEEK		
12	Wednesday 16 th December	Time to be announced	Deadline for putting up your drawings for the final crit
	Thursday 17 ^h December	09.00 onwards	Final crit

Context

This module runs parallel to other Stage 2 modules, including

AR514 ACM
AR506 Post-Enlightenment Interior

Students are encouraged to show that they can integrate ideas between the three modules, using their own design work as the basis for their approach to technical and historical enquiry.

Submission and assessment

In order to meet the learning outcomes of this module you will need to provide the following drawings and documents. Note also the **assessment criteria** below.

Design submission

You will submit the following for assessment at the final crit in week 12. Look at the assessment criteria below for details of how your work will be assessed.

1. A set of orthographic drawings at appropriate scales indicating scheme proposals. Building plans, sections and elevations must be drawn at scale of not smaller than 1:200 and must include reference to materials. You must include a plan of the whole of the site up to its boundaries and adjoining areas, showing access and landscaping at a reasonable scale.

2. Freehand drawings and computer images indicating material qualities, atmosphere of scheme, etc. These must include views of your schemes from other buildings on the academy campus. This drawing should include detailed information about the site, in the form of a photographic collage, or measured or perspective drawing.
3. A sketch book charting the development of your scheme and the influences on it, including a collection of relevant material as you have progressed through the module.
4. Models at various scales indicating massing of scheme, design idea and exploration of internal spaces.
5. Diagrammatic drawings and models showing scheme concept and organisation.
6. A schedule of accommodation giving the area in square metres of each of the spaces you have designed.
7. Drawings, images and sketches prepared for the two design exercises.
8. Fire escape routes and distances between escapes.
9. 1:20 labelled wall construction section, showing a characteristic or distinctive part of your design, construction including junctions with floors and roofs.
10. Axonometric/Isometric/Perspective detail of services/structure/construction integration both vertically and horizontally.
11. U-value calculations.
12. Artificial and daylight lighting proposals for a particular space.

Assessment criteria

Feedback sheets for formative and summative assessment will grade you on the basis of the following:

Assessment criteria for design proposals:

- 1 Has the student presented all the required finished drawings?
- 2 Do the drawings represent a coherent scheme which reflects the student's engagement with the brief and with his / her tutor?
- 3 Does the scheme provide the required accommodation specified in the detailed brief?

- 4 Has the student addressed all four key design aspects (on page 2 above)
- 5 Are the finished drawings and other media executed to a high standard?
- 6 How has the student engaged with the process of working with pupils at the academy?
- 7 How has the student engaged with the two design exercises?
- 7 Do construction details demonstrate an understanding of construction techniques, and use appropriate materials, bearing in mind economy, function and environmental impact?
- 8 Does the design demonstrate an understanding of the requirements of fire regulations and other relevant legislation?
- 9 Do the lighting studies demonstrate an understanding of the size and distribution of openings required to provide a well daylit interior?

Component weightings:

You will receive separate percentage marks for design, and for environment and technology.

Your percentage grade for design will account for 80% of your final grade, and your percentage grade for environment & technology with account for the remaining 20%. You must pass both components – if you resit or late-submit one component, the entire module will be capped at 40%.

Refer to the School Handbook for general information on assessment criteria:

<http://www.kent.ac.uk/architecture-local/handbook.htm>

General advice about the module

Tutorials

You must come to tutorials with:

Tracing paper

Soft pencils or a fine pen with permanent black ink

A scale ruler.

It is not acceptable to show your tutor your work on a laptop: you must bring prints or drawings.

Your sketch book

The purpose of your sketchbook is to record and develop your ideas and inspirations. We suggest you buy a small bound notebook and keep it with you all the time. Your work will be assessed on the basis of the degree to which it has been fully developed by you with your tutor over the course of the whole of the term. The sketchbook will provide the evidence that you have done this.

Assessment and finishing off your work

All your work must be up by the agreed deadline the night before the final crit – it will be stamped to show that you brought it on time. No late work will be permitted.

After the crit you should convert your work into an A3 portfolio, organising all your material into numbered pages with a contents sheet at the front. You should have this done for all of your work by the examination period in the summer, and so you are advised to do this for 'Adapt and Extend' as soon as you can.

You need this A3 portfolio for three reasons:

- 1 because you might be asked to present your work to an external examiner
- 2 because you will have to present it in this form at the beginning of Stage 3
- 3 because it will help you when you are looking for a job.

You'll get a low grade if you present for assessment

- Bad computer drawings and inferior quality prints. The examiners are the judge of what is 'bad'.
- work which gives the impression that your use of the computer has distracted you from developing your design fully
- unnecessarily ornamental computer fonts and unrepresentational printer colours

Look at architects' and designers' drawings to get ideas about how to draw and present work.

Retrieval tutorials

Retrieval tutorials will be held in the ten days following the end of the summer term. Make the most of this opportunity if you need it. Tutors will not necessarily be available in the weeks before the August submission date. Don't email large files to tutors for comment without prior arrangement.

Recommended reading

Refer to the Templeman Library website for updated details of the reading list

<http://readinglists.kent.ac.uk/rl/displaylist?module=AR529&year=2009>

Further texts will be recommended during the course of the module. We recommend at the outset that you look at the following:

The first book on the list is currently being offered at 30% off on Amazon. If you order it before 31st October you can purchase it with a reduction of 35% if you contact the module convenor.

Mornement, Adam and Biles, Annabel. 2009. *Infill: New Houses for Urban Sites*. London: Laurence King. ISBN 978-1856695589

Cantacuzino, Sherban and Brandt, Susan. 1980. *Saving old buildings*. London: Architectural Press. (ISBN: 0-85139-498-1)

Cramer, Johannes and Breitling, Stefan. 2007. *Architecture in existing fabric: planning, design, building*. Berlin: Birkhauser. (English edition: ISBN 978-3-7643-7752-6)

Forsyth, Michael, *Understanding historic building conservation*, (2007), Chichester: WileyBlackwell. (ISBN 978-1405111720)

Littlefield, David and Lewis, Saskia, *Architectural voices: listening to old buildings*. Chichester: John Wiley & Sons. (ISBN: 978-0470016732)

Powell, Kenneth. 1999. *Architecture reborn: the conversion and reconstruction of old buildings*. London: Laurence King. (ISBN: 1-85669-129-2)

Scott, Fred, *On Altering Architecture*. 2007. Abingdon: Routledge. (ISBN: 978-0415317528)

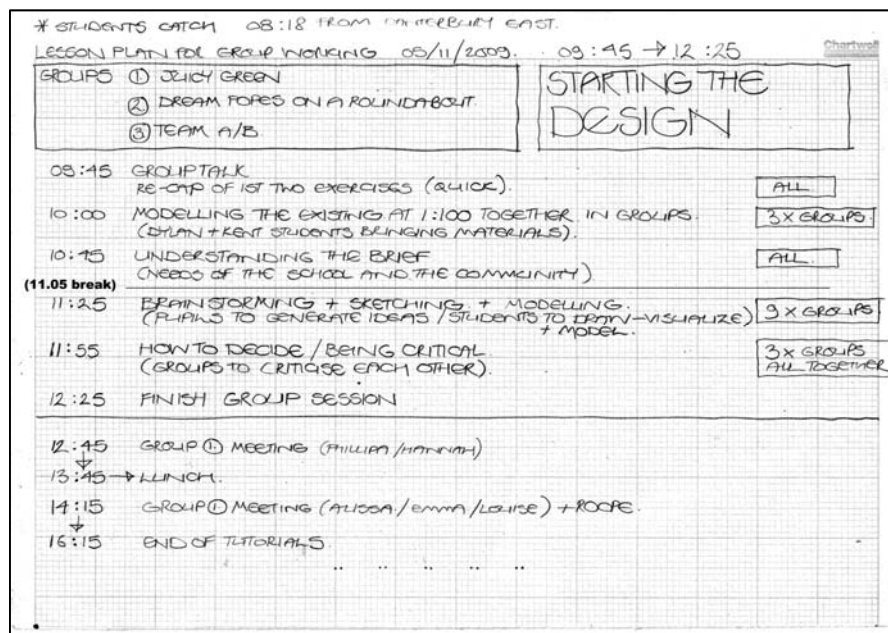
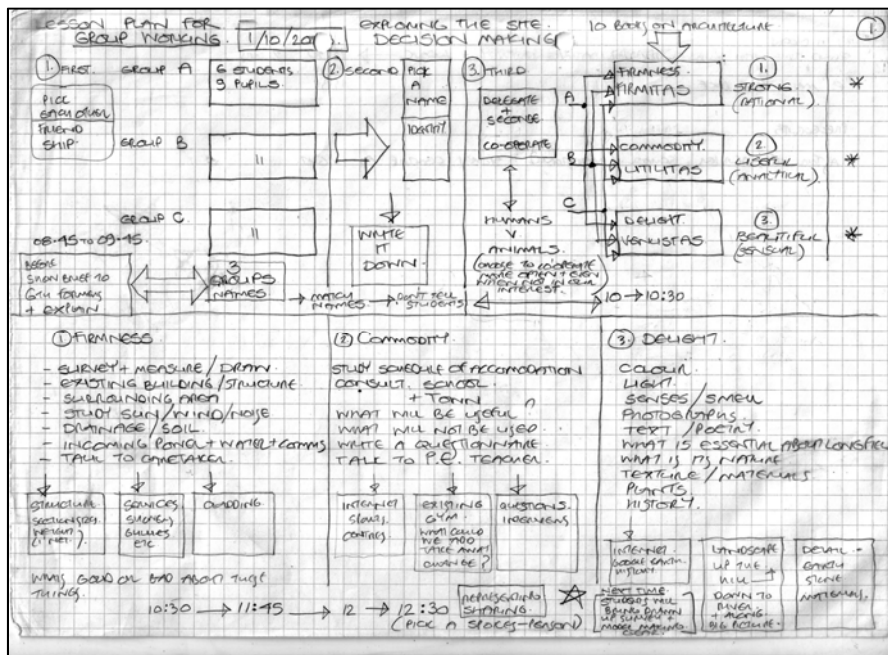
Useful information may also be found in *Detail* magazine's 'Building in Existing Fabric' series: see <http://www.detail.de/Newsletter/EnglishExtra/HTML?ansicht=1&ausgabe=2008%2F09%2F16&nl=EnglishExtra>

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX SIX

These timetable diagrams were prepared for students in advance of meeting with pupils



LESSON PLAN FOR GROUP WORKING 12/11/2009. 09:45 → 12:25.

GROUPS @ ① JUICY GREEN / NODES WITH A MONARCHIL
 CONCEPT / ② POPES / 3-1 THINGS IN THE LEAF
 IDEA ③ TEAM A/B / MULTI STOREY RACE TRACK

① IDENTITY AND PLACE - TEAM PHOTOS.

09:45 EXPLANATION OF TASK / POSSIBILITIES.
 10:10 DISCUSS THE APPROACH.
 10:20 TAKE THE PHOTOS / GET THE MATERIAL.
 10:50 EXPLANATION OF "HOMEWORK" FOR NEXT TIME (THE GRAPHIC)

② DEVELOPING THE DESIGN BUILDING ON THE IDEA

11:25 DELEGATING WITHIN THE TEAMS.
 - STRUCTURE MODEL }
 - SITE PLAN / ^{CONCEPT} } 3 TASKS.
 - CARD MODEL }

11:35 WORK ON MODELS.
 - USING THE POWER OF A TEAM.

12:25 MANY HANDS MAKE LIGHT WORK

GROUP B/2 / POPES. 12:45 - 13:15 ROOPE.
 TUTORIALS 13:15 - 14:00 LUNCH.
 14:00 - 14:30 ELIZABETH
 14:30 - 15:00 SARAH
 15:00 - 15:30 JAMIE
 15:30 - 16:00 LEE
 16:00 - 16:30 BRUIP.

LESSON PLAN FOR GROUP WORKING 2/12/2009. 09:45 → 12:25

GROUPS A ① JUICY GREEN CONCEPT TEAM PHOTO
 B ② POPES NODES WITH A MONARCHIL • OUTDOORS / SWAMP PEX 301
 C ③ TEAM A/B LEAF • POPES IN MODEL PHOTO.
 MULTI-STOREY RACE TRACK • TREE CLIMBING

PRESENTATION

FROM THE LATIN "PRESENTATIONEM"
 → PLACING BEFORE.

09:45 • EXPLANATION OF PRESENTATION ON THE 17TH AT UNIVERSITY / WHY DO IT?
 • WHAT IS A PITCH. / WHO IS PRESENTING TO WHO
 • WHAT TO PRESENT / GETTING THE KEY INFORMATION ACROSS / INTRODUCTION
 • HOW TO PRESENT / FIRST IMPRESSIONS / REPRESENTATION / LIGHTING / PERFORMANCE.
 • THE CONTENT / MODELS / TEAM PHOTOS / OUR WORKSHOPS (X5).

10:10 DELEGATING WITHIN THE GROUPS.

• HOW ARE GROUPS SHAPING UP / NAMES / CHOOSE ORGANISERS *

10:20 • DELEGATING ~ ① PRESENTATION TEAM

↓
 NOMINATED TEAM.

② IDENTITY TEAM * 2.

③ PROJECT DELIVERY TEAM * 1.

10:30 WORK ON INDIVIDUAL TASKS

11:05 BREAK.

11:25 WORK ON INDIVIDUAL TASKS / ORGANISERS IN SUPPORTING ROLE

12:15 MEET AGAIN IN STEVE'S ROOM / IMAGE FILES * 2 / TRANSPORTING MODELS * 1.

12:25 END.

13:00 KSA TUTORIALS [13:00 DANIELLE
 13:30 LUNCH. [14:00 MARIA
 14:00 KSA TUTORIALS [14:30 GWYNETH
 [15:00 SEEN
 [15:30 AMELIA
 [16:00 TONI.]

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX SEVEN

Dylan Haughton's notes for the Longfield Academy/KSA study trip to London

Purpose of trip

For the three student-pupil teams to bond away from their educational environment

To visit and appraise two sports buildings one new and purpose built, one adapted from a church to develop ability to be critical and learn from existing environment and end users.

To understand directly through the exercise class the experience an end user has and their physical relationship with the space/building, appraising that experience and learning from it.

I will circulate a set of questions for the students/pupils to ask of themselves/the buildings/users etc. that I will circulate in the morning, based loosely on the 3rd year buildings appraisal module.

Programme

8.00	Students leave from Elliot Car Park
8.45	Pupils leave from Longfield Academy
09.45	Rendezvous Clissold Road, Hackney 63 Clissold Road, London N16 9EX
10.00	Visit to Clissold, leisure centre by Hodder associates – purpose built, gyms pools etc. all singing all dancing v. new
11.00	Move to Ladbrooke Grove in west London Powis Square, London W11 2AY. 020 7221 9700
12.00	Exercise Class at Tabernacle centre
13.00	Lunch at Tabernacle centre
13.45	Longfield pupils head home

14.00	Students to study adaptation of listed building and investigate history of community involvement
15.00	Move to Fitzroy Square for Arup sport talk
16.00	Arup Sport Talk
17.30	Students head back to Canterbury in bus or on train at own expense

Key Health and Safety issues

- Getting on and off bus generally.
- Anyone with specific injuries should perhaps avoid exercise class



Longfield Academy / Kent School of Architecture. Building Study Trip Tasks 2009



firmness

1. Take a photograph of or draw the most important structural connection
2. What is the structural system?
3. What is the building made of, walls, floors and roof?
4. Ask the end user if there is something that frequently wears out and needs attention?



commodity

1. Analyze and photograph the entry sequence into the building
2. Ask the end user if the spaces are the right sizes and in the right places?
3. How does the building work economically?
3. How is the building heated, ventilated and lit?



delight

1. Try to record your reaction to the building standing outside it and then inside it.
2. Ask the end user where his/her favourite place in the building is
3. What would you say is driving the arrangement of the space and light in the building?
4. Is there a "big" idea?

MAKING THE MOST OF STUDENT-PUPIL COLLABORATIONS IN ARCHITECTURE SCHOOLS

KENT SCHOOL OF ARCHITECTURE WITH DYLAN HAUGHTON ARCHITECTS

APPENDIX EIGHT

Feedback Report 2009-10: Dylan Haughton

Introduction

I am an architect practising in central London and have worked as a sessional tutor for the University of Kent for 10-20 days per year during 2007 to 2010 in the first and second year programmes. I helped to organize the joint project with Longfield Academy in 2008-2009 and this report follows on from the report for that year.

Participants

Longfield Academy (the Academy)

The school is in a small town in Kent near to Rochester, the school buildings are in a poor state of repair; the site has many systemic problems. The school is currently in the process of commissioning the design of a new set of buildings through the Building Schools for the future programme and aim to move to new building on the neighbouring site when they complete.

University of Kent School of Architecture (KSA)

KSA is based on the campus in Canterbury and runs a project at the beginning of second year called Adapt and Extend that seeks to introduce students to some of the issues around adapting and extending existing buildings for re-use. The problematic buildings at Longfield School were seen as a good vehicle for this project and an opportunity for a group of second years to engage with a real client and a real set of problems.

Lessons brought forward

An analysis of the 2008-09 project suggested four ways that the process might be improved:

- Early planning of the project
- Better co-operation between the institutions
- More carefully defined group working
- A brief linked with the reality of the school regeneration

Planning and Co-operation

I spent time before the start of term liaising with KSA staff and produced several drafts of a detailed programme. This was important in order that both institutions commit to the process. I had learned from the previous year that institutions find it hard to deviate from their corporate timetables and establishing how the contact between the student groups was to fit around the schools half term holidays and the

university study trips, reading weeks and crit week was vital. I loosely based the form of the contact on the process the Sorrell Foundation had given us the year before but themed the contact days to suit the brief we decided the two student groups would address together. I produced a lesson plan for each classroom based contact, each theme addressing a stage of the design process:

1. exploring the site, firmness commodity and delight
2. study trip to London / exploring building precedents together
3. brainstorming then sketching then modeling
4. comparing and transferring ideas with the students
5. finishing the 3 models together
6. presenting group work together

The lesson plans added a simple clarity to the contacts and followed a format whereby an idea was introduced, a task done and the work discussed at the end of the contact time. The students and pupils were put into positions where they needed to vote, give feedback and express opinions on the work, I tried to make the contacts relaxed and fun, with time for the student groups to build relationships and thereby work together more effectively.

Group Working

In the previous year we had been working with a group of pupils from across the years, with ages ranging from 12 to 17. This had put us in the position where we had to gear the contacts towards the average level of input possible from such a diverse group and this meant the older pupils were held back some of the time. I had also noticed the previous year that the pupils expected to join in with the design process and we had adapted the lessons to give the pupils some time doing this. In the Sorrell process the pupils act as clients only.

The pupil group for the 2009-10 project was made up entirely of 17 year olds and so I decided the best approach would be to establish a project with a dual path, one simple for group work and one complex for the individual work of the architecture students. This had not been so easy the year before with the roles of the pupils and students split into clients and designers because there was little incentive for the architecture students to invest energy in the group work with the pupils. This year we made it clear the contact/group work would form part of their assessed grade for the term. This required the architecture students to split their group work from their own work in their minds and they managed to do this, indeed, they learned important briefing lessons in the group work and used it as a sounding board for their own projects in many cases.

We formed three groups, leaving the students and pupils had to choose each other, choose leaders, taking responsibility as a group, build their team with names and photos and delegate tasks in order to deliver alongside the other groups. In general the "strong" females and the "strong" males formed two groups with others forming the third group. We kept the "deliverables" simple, each group had to produce a team name and photo and an A1 model of the frame building adapted to suit new functions, the teams had to choose a pupil and a student to present the model to the second year at the school of architecture in a slot at the start of the end of term crit day at the university.

A “real” brief

The previous year we had asked the architecture students to take an overview on the existing school and suggest ways in which it could be adapted and extended to prolong its useful life. While this brief stretched some of the less able students it was successful in the main. I had noticed, however, confusion amongst the pupils about the fact that the school is scheduled for demolition and rebuilding. They have been part of the consultation process and the new school is on site at the end of their playing fields and so I decided the brief should be adapted to suit this situation. There is a gym building in the existing school adjacent to the new school site and I decided a good brief might be to ask the groups to look at ways this particular frame/space might be adapted/extended to provide facilities that may not be included in the brief for the new school, with an emphasis on sports health and performance. The students consulted in the school and in the town as to what the function of the adapted building might be and produced their own analysis of this in a set of pie charts.

This approach was generally successful as it gave a clear focus to the work within a defined area of the school. Its realism encouraged the students to look at how the new school would link with existing town and encouraged the pupils to look at and analyse their new school buildings. We interviewed the head of PE as part of the design process, visited several sports buildings in London engaging in a Yoga class as one big group.

What worked and what didn't work

Mismatch of expectations

The pupils were tasked in the same lessons to carry out a project around identity and place. I was aware of this brief but was not aware that the core activity the school had identified to fulfill this brief was photography. This created a mismatch in expectations that we had to deal with through the term. The school has perhaps not taken on board that the core activity of the school of architecture is learning to design, photography can support this but is not central. The school perhaps found this focus slightly alien as they obviously teach multiple subjects, design is often a workshop led activity (CDT) in schools, we used the workshop staff at both institutions to help with the models but the our focus was on ideas and the design process. This is the core of what architecture schools can take into secondary schools and offer to pupils, there may be many methods and means but the opportunity for schools to engage with design process is central. This is perhaps not well understood by schools and the role of architecture and architects perhaps needs to be better explained to schools at the outset of any joint project.

The lesson to take forward is to establish clearly the main substance of what will be learned over the term and ensure ahead of time that the brief fits the learning requirements of both institutions.

Conclusions

The project was successful on the whole, the presentation at the school of architecture, engaging with the students and the design process was a great opportunity for the pupils and the ability to engage closely with end users and a site was a great opportunity for the architecture students.

Dylan Haughton RIBA.