Promoting teamwork through partnering workshops

A case study of partnering workshops in the construction of Oakfields Primary School, Wickford, Essex.

CONSTRUCTING EXCELLENCE

Innovation ■ Best Practice ■ Productivity

Contents

Acknowledgements

This case study is based on an account of workshops observed by Eclipse Research Consultants, following participation in two research projects: Achieving quality through interdisciplinary teamwork and Measuring the effectiveness of teamwork in construction. Both projects were funded under the EPSRC/DETR LINK Integration in Design and Construction programme and carried out by Eclipse in conjunction with the Department of Architecture at the University of Cambridge. The support of the industrial participants is acknowledged.

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Foreword

Successful teams get results. The evidence of teamwork is in individuals – they are motivated, have a confident 'can do' attitude and they get personal satisfaction from a job well done. Successful teams liberate people to think and share their ideas. Successful teams are able to cope with change through better communication and growing trust. That is why the 'Integrated Team' is at the heart of the Constructing Excellence strategy.

Dennis Lenard
Chief Executive
Constructing Excellence

Hundreds of demonstration projects have proved that partnering draws people together where they were formerly adversaries, many using partnering workshops as the forum for team building.

My thanks go to Essex County Council, French Kier and Atkins for giving Constructing Excellence 'fly-on-the-wall' access to their partnering workshops. The framework, techniques and references in this case study should prove useful to project teams across the construction industry.

Overview

Success in construction depends on teamwork; but when people are brought together on a project, collaboration does not happen automatically. Lack of organisation, misunderstanding, poor communication and inadequate participation frequently undermine success.

Professionally facilitated workshops can transform a disparate group into a team that is ready to agree mutual objectives, equipped with processes for resolving problems and committed to making continuous improvement.

This case study

Promoting teamwork through partnering workshops is intended for those who lead, facilitate or participate in project teams. This case study traces a series of seven partnering workshops, follow-up evaluation and feedback at Oakfields Primary School, which is a Demonstration Project for the Movement for Innovation. It illustrates the substantial gains that arose from well-managed collaboration.

The team who commissioned, designed and built the school concluded unanimously that the workshops helped them to:

- ensure consensus and a focus on solutions
- anticipate and report on problems before they affected the project
- keep team performance under continuous review
- establish learning points during the programme.

What the partners achieved

A high degree of satisfaction with the outcome from all parties

On-time delivery

No surprises

No disputes

No claims

No three-day reportable accidents, only minor incidents

Very few letters written

Very few Architect's Instructions

Very slight cost overrun, shared between the parties.

Point of view

Chris French
Capital Programmes and Standards Officer, Essex County Council

We started partnering from a position where a lot of our larger projects were late and over budget. Quality was good but the process was painful.

We saw partnering as a way of reducing conflict, working closer together as a team with common objectives, and hopefully addressing many of these issues.

The French Kier facilitator was excellent. He managed to get a disparate group of individuals to work together with a mixture of humour and frankness, which worked. He did not show any bias and was accepted by the group as their mentor. We were very lucky to have had access to such a charismatic individual.

Background

Oakfields is a £1.26m, seven-class primary school for up to 210 children from 'reception' (age 5) to year six (age 11). It was designed and constructed in just over one year in 1998/99. This configuration of primary school is widespread in Britain. Responding to the government's encouragement for local authorities to adopt partnering as the preferred method of procurement, Essex's Corporate Services Department wished to identify the advantages and disadvantages of partnering in comparison with conventional competitive tendering. Essex had prior experience with partnered construction of The Essex Record Office, but none yet in schools.

A model school – In the mid 1990s Essex County Learning Services and Corporate Services Departments collaborated to devise a model brief and budget for primary schools. They held a value-engineering workshop in 1997, with in-house designers, to devise a prototype seven-class primary school. The result of this professionally facilitated workshop was an exciting concept design, estimated to cost about £50,000 (some 4%) less than the County's cost allowance for a school of this type. Workshop participants desired a light and airy interior, but did not specify how this should be achieved. The financial viability of the model school needed proving. Oakfields Primary School at Wickford was selected, in early 1998, to be the test bed.

The workshops – Essex took procurement advice from Atkins who provided a partnering adviser to support the team. Although the client took design responsibility under the ECC Option C – Target Contract with Activity Schedule, the strategy was to engage the main and key trade contractors in the detail-design to improve buildability of the school. A formula would also be devised for sharing the 'pain' and 'gain' in design and construction costs between the client, designer and main contractor. Although common now, these ideas were trailblazing for Essex at the time.

The programme allowed for a 26-week detail-design phase (with contractor involvement) and 35 weeks for construction. Although the workshops were an Essex/Atkins initiative, the managing director of the main contractor, French Kier, facilitated most of the sessions. (During the tender assessment phase he had mentioned his experience of running workshops, learned in power station construction.) French Kier's contracts manager deputised in his absence. The workshops were co-organised with the partnering adviser. The first was held in July 1998 when detailed design began, the second six months later when construction was starting, with others following at approximately two-monthly intervals through to September 1999, a week after the school opened.

The first one-day workshop was for the client, design team and contractor. Key trade contractors for steelwork, roofing, cladding, glazing, and mechanical services joined subsequent workshops, when they were selected.

The timings and agendas are given with the accounts of the workshops, commencing on page 10.

Towards strategic partnering – The lessons learned at Oakfields propelled Essex to move on to strategic partnering contracts with Atkins and two separate contractors for five projects. Two further projects have been successfully completed under this framework and another tranche is planned.

Team workshops were used again in these strategic partnerships, with Atkins providing the facilitator, and Essex confirm that the workshops were successful in promoting team working.

Client Profile

Essex County Council has been at the forefront of new approaches to school building. In the 1970s the council pioneered schools that embodied the principles of energy conservation. In the 1980s they commissioned schools that utilised solar gains to offset conventional heating. And in the 1990s Essex collaborated with the Design Council to commission a new school, Notley Green Primary, embodying the principles of sustainable development.

Essex County has received considerable publicity and praise in the professional and technical press for innovative schools.

Essex's objectives in constructing Oakfields were to:

- construct a school to the new value-engineered brief and budget
- open the new school on time
- evaluate the advantages and disadvantages of partnering.

Workshop techniques

There is no magic formula for conducting partnering workshops, but there are some common threads in successful projects. This summary lists the techniques that were used in the Oakfields workshops.

Rules – The facilitator establishes the kind of behaviour expected of the delegates at the outset (see Workshop rules, opposite). In the interests of having uninterrupted sessions, some facilitators also make specific requests such as full-time commitment to the workshop and no telephone calls.

Plenary and breakout sessions – Most of the time, all the delegates are in one group (plenary sessions) but sometimes the facilitator divides them into separate groups to discuss a topic (breakout sessions) then report back to the whole team.

Round table discussion – This is often a brain storming exercise in which the facilitator initiates discussion and records the delegates' responses, usually on a flip chart. The goal is to cross-fertilise ideas. The facilitator helps everyone to contribute, not just the more vocal delegates.

Post-it notes – These adhesive sheets are ideal for assembling and reassembling ideas on a board. Mixing multi-coloured notes together can present a powerful message when contributions have come from a variety of sources.

Risk register – Technically, this is a project management tool but many teams decide to make a start in their first workshop. Identifying potential risks, likelihood of occurrence and implications is a logical practical development of the 'anticipating problems' theme. The risk register, started in Oakfields workshop 1, was developed as the project progressed.

Partnering charter – Although it has no legal significance, a partnering charter has a highly symbolic function, committing the signatories to work to joint aims. Now a popular technique in partnering workshops, it can be a convenient way to remind team members of the standards they signed up to, especially when the heat is on. The charter adopted by the Oakfields team is on page 5.

Expose expectations – The maxim 'it's better out than in' is the basis for this technique. Sometimes this reveals fears that what has gone wrong in the past will be repeated in this project. A list of delegates' bad experiences that were discovered in the second workshop is shown opposite. Oakfields delegates went on to examine these issues and co-operated in finding ways to avoid or mitigate them.

Anticipating problems – Learning to anticipate problems and collaborate in solving them is a vital outcome of team workshops. A list of problems anticipated during workshop 3 is shown opposite.

Action list – An action list (see example, opposite) draws discussion to a close. Each action should be time bound and state who is responsible.

Workshop techniques continued...

Evaluation – Examples of the techniques used to evaluate the processes and the project are:

- The workshops – see self-assessment tool on page 8
- The partnering process – see workshops 5 and 7, and post-completion interviews on page 18
- The product – see workshop 6 and post-completion questionnaire for staff on page 18.

Workshop rules

Be open and frank.

Address issues not personalities.

Be punctual and efficient.

Be positive and constructive.

Keep an open mind.

Seek to achieve consensus.

Bad experiences

Late payment

Lack of communication and supervision

Poor access and on-site facilities

Variations in programme, surprises

Design changes

Lack of technical support

Quality and behaviour of employees.

10 actions to solve foreseeable problems

1. **Develop and adhere to a Cost Plan.**
2. **Achieve Department for Education approval.**
3. **Achieve statutory authority approvals.**
4. **Agree levels of design information.**
5. **Provide design information for initial works.**
6. **Clarify M&E design input.**
7. **Ensure design co-ordination across disciplines.**
8. **Agree a plan for commissioning mechanical services.**
9. **Restrict site access to prevent damage and theft.**
10. **Devise a programme that allows for buildability input.**

Anticipating problems on site

- Late design
- Site access
- Information
- Site facilities
- Financial control
- Security
- Safety
- Publicity
- Programme
- Commissioning defects.

Workshop assessment

The facilitator introduced a self-assessment system for use at the end of each workshop. Delegates rated themselves against ten goals, using a scale from -5 to +5. The scores for each goal and the average score across the ten goals, for each workshop, are as follows.

Observations

The improving average scores (0, 1.7, 3.0, 3.5, 3.7) illustrate the delegates' perception that their partnering behaviour improved as they went along.

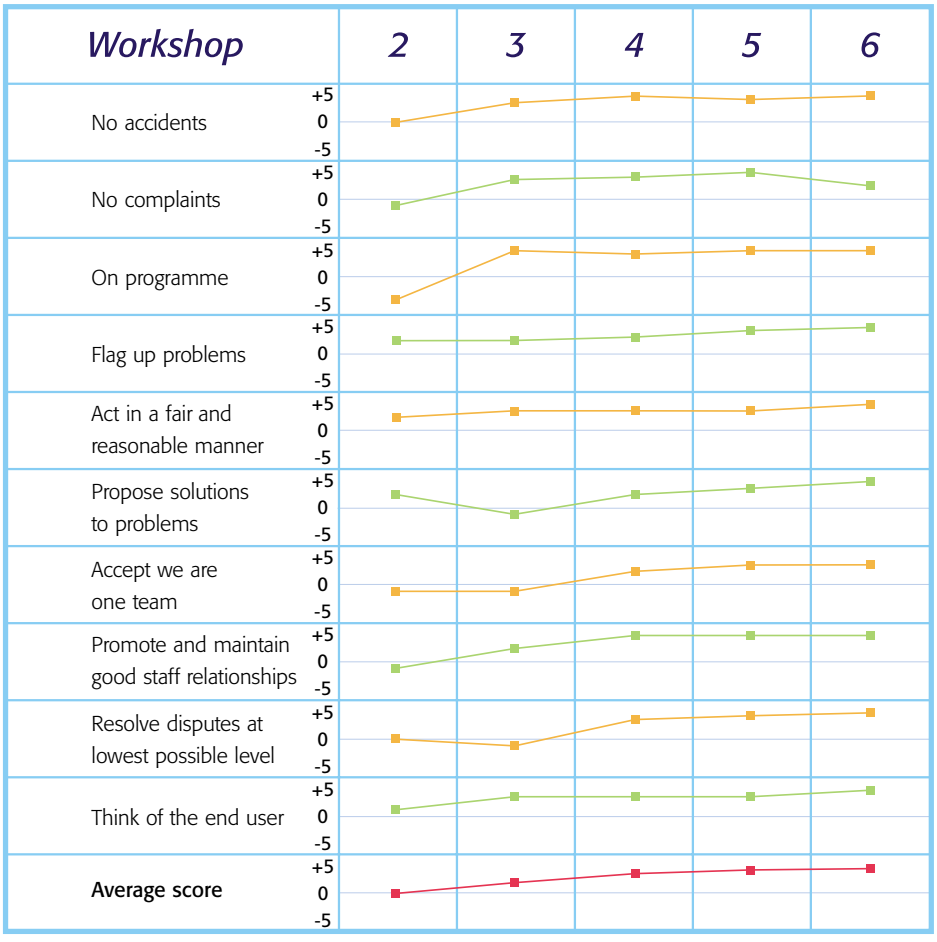
Workshop 2 – The generally low scores highlighted doubts about achieving the programme and their ability to gel as one team. Delegates were also taking a conservative view of the future.

Workshop 3 – This workshop saw a surge in confidence that the project could be delivered on time, with no accidents and few complaints. Delegates felt they were more focused on the needs of end users but had reservations about whether they were really solving problems as one team and resolving disputes at the lowest level.

Workshop 4 – Although confidence in achieving the programme had slipped a little, everyone felt the 'one team' approach was working much better now and they could see the benefits of airing problems, solving them together and resolving disagreements without recourse to superiors.

Workshop 5 – There were only marginal changes in scores. Sharing and solving problems as one team had now become the norm.

Workshop 6 – In this final self-assessment, the average score peaked at 3.7, a satisfying result notwithstanding concerns about relations with some of the schools immediate neighbours.



Point of view

John Bradley
Managing Director,
French Kier Anglia

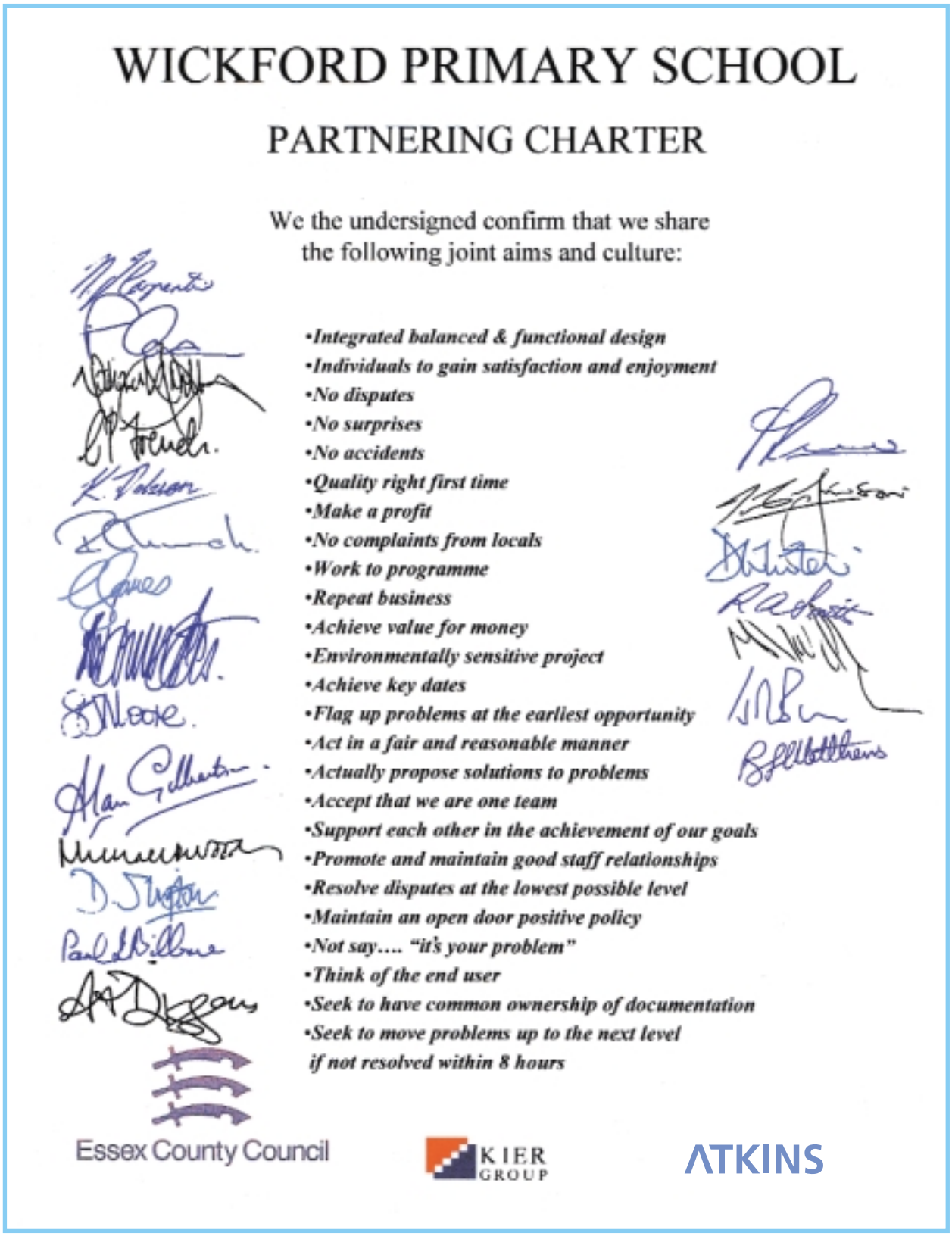
When facilitating I like to use the pinboard technique, part of the Neuland Moderation presentation system. It means the person with the best idea gets noticed, not the loudest.

We made quite big changes in the behaviour of team members. Many people hadn't given much thought to the composition of the team with clients, designers and constructors working together. But the self-assessment shows that we turned this around in time to make a real difference.

Co-operation and trust was better. We had no claims for time and cost although we would have expected many on a traditional project. Ian Bilboe, our site agent, said: 'I've learned to be more open about the programme and raise problems rather than try to keep them contained.' That sums up what I try to achieve in partnering workshops.

Partnering Charter

The Partnering Charter was developed in the first workshop. The facilitator partners recorded the partners' joint aims during the day for incorporation into the Partnering Charter. All the delegates signed the printed charter in the afternoon.



WICKFORD PRIMARY SCHOOL

PARTNERING CHARTER

We the undersigned confirm that we share the following joint aims and culture:

- *Integrated balanced & functional design*
- *Individuals to gain satisfaction and enjoyment*
- *No disputes*
- *No surprises*
- *No accidents*
- *Quality right first time*
- *Make a profit*
- *No complaints from locals*
- *Work to programme*
- *Repeat business*
- *Achieve value for money*
- *Environmentally sensitive project*
- *Achieve key dates*
- *Flag up problems at the earliest opportunity*
- *Act in a fair and reasonable manner*
- *Actually propose solutions to problems*
- *Accept that we are one team*
- *Support each other in the achievement of our goals*
- *Promote and maintain good staff relationships*
- *Resolve disputes at the lowest possible level*
- *Maintain an open door positive policy*
- *Not say…. "it's your problem"*
- *Think of the end user*
- *Seek to have common ownership of documentation*
- *Seek to move problems up to the next level if not resolved within 8 hours*

Essex County Council

KIER GROUP

ATKINS

The process

WORKSHOP 1

6 months before start on site

Agenda

Introductions
Objectives
Rules
Client's aims
Partnering concepts
Expectations
Shared aims
Cultural issues
Experiences from past projects
Partnering charter
Risk register
Actions

Forming the team

The first partnering workshop was at a neutral conference centre in July 1998, when detail design was beginning and six months before the start on site. There were 22 delegates: four from Essex, eight from Atkins, and ten from French Kier.

The facilitator set out the aims for the workshop:

- to launch the project with a positive and enjoyable experience
- to engender a spirit of collaboration
- to gain commitment to a Partnering Charter
- to agree a risk register for various contingencies.

Then the Essex Learning Services representative explained the history of the value-engineering workshop and how it had led to the model.

What is partnering? – The partnering adviser (an Atkins delegate) introduced the concept of partnering and defined it broadly as a joint commitment to:

- understand and identify with one another's goals
- develop team goals and devise a strategy to achieve those goals
- develop trust and move beyond 'the blame culture'.

A round-table discussion about what the participants wanted from partnering followed. These elements emerged:

- understand each others goals
- identify mutual goals
- develop a strategy to achieve the goals
- develop trust and teamwork
- jointly evaluate problems
- make timely decisions.

Partnership Culture

In round table discussion the delegates identified a variety of actions to meet the aims under three main headings.

Attitude, commitment and communication

- Be constructive and have an open door policy.
- Consider the needs of end users.
- Be open and frank with one another.
- Foster a culture of mutual respect.
- Cut paperwork; only solutions need to be recorded.
- Make joint reports when appropriate.

Objectives

- Set objectives.
- Identify key dates and track progress.
- Agree a schedule of information requirements.

Problems and disputes

- Anticipate and share problems.
- Do not hide, disguise or pass problems to others.
- Instead of apportioning blame, propose solutions.
- Accept others' problems as your own.
- Resolve disputes at the lowest level.

French Kier	Atkins	Essex
All to work as a team	A fully integrated design	An integrated design
Minimise defects	Satisfaction and enjoyment	An elegant building to be proud of
Minimise risk	Control risk	No defects
Repeat business	Work efficiently	No complaints from occupants
Cascade partnership ideals to trade contractors	Profitable business	No complaints from neighbours
Get early information	Keep to programme	No claims
Discuss before writing	Keep to budget.	Solutions not problems
Build safely		No letters, and no conflict
Culture of openness		Good value for money
Clear responsibility		On time
No variations.		On budget
		No surprises
		Not to win a prize then become a maintenance nightmare.

Hopes – Organisation-based breakout groups were given half an hour to brainstorm their aims for the project, and record these on different coloured post-it notes. When the three groups came back together, the aims of all three were pinned up (see the table, left). The facilitator collated the three sets and, with the delegates' assistance, linked those that were held in common and retained those held by only one or two of the three organisations. As the coloured post-its mixed, it became obvious that many hopes were shared. A shorter set of shared project aims emerged for later incorporation into the project charter.

Fears – In the afternoon, the organisation breakout groups resumed and were asked about things they did not like in past projects (see table, right). Then they divided into two mixed groups to devise short slogans that would underpin their aims and overcome their dislikes. These and all of the conclusions so far were summarised in the Partnering Charter.

French Kier	Atkins	Essex
Master/servant attitude from designers	Budget doesn't match the brief	Designers 'robbing Peter to pay Paul'
Incomplete design	An unrealistic programme	It's always our problem
Late information	Brief is unclear	We eventually pay anyway
Poor details and information	Client indecision	Get problems not solutions
Late design changes	Client delays fixing layout and equipment	Discontinuity of staff
Poor buildability	Client seeks to allocate blame	Architects forgetting what they have done and why
Unfair, one-sided contract	Contractor has hidden agenda to maximise profits	Design omissions
Inadequate payment for changes	Contractor treats subcontractors unfairly	Poor design co-ordination between disciplines
Unrealistic budget	Contractor lacks skilled tradesmen and requires very detailed drawings	Designers and constructors blame each other
Nominated subcontractors not performing	Contractor does not remedy defects.	We are the last to hear even though we end up paying
Indecision		Pressurised hand-over
Late payment		Protracted defects period.
Unrealistic expectations.		

Partnering Charter – One of the most important outcomes of the day was the Partnering Charter (see page 9).

Risk Register – After signing the charter, the delegates made a start on the Risk Register (see page 6).

Foreseeable problems – To conclude the workshop, organisation-based breakout groups each identified six problems they could foresee. Back in the plenary session, these were collapsed down to a combined list of actions required to overcome the foreseeable problems, each with a note of who would do it and by when (see 10 actions to solve forseeable problems, page 7). Most of these actions required subsequent meetings and these were agreed before the workshop was adjourned.

Achievements of this critical first workshop – The inaugural workshop was an opportunity for the project team to meet and get to know one another on neutral territory. The delegates were able to air concerns about this and past projects, and discovered how closely these mirrored the concerns of the others. Above all the workshop encouraged team thinking. A shared set of ambitions emerged with a strong sense of common ownership. Finally, it encouraged a focus on finding joint solutions and moving beyond the 'blame culture'.

It would be nearly six months until the second partnering workshop, scheduled for just before start on site. With hindsight, the partners felt this interval was probably too long because, as is shown in the concluding feedback, the benefits of early contractor involvement could have been realised more fully.

WORKSHOP 2

1 week before start on site

Self-assessment score = 0

Agenda

Introduce trade contractors

Review principles of partnering

Contractors versus the rest

Critical problems

Anticipate problems

Self-assessment

Enlarging the team

The second workshop was another whole day session. There were 20 delegates: four from Essex, four from Atkins, seven from French Kier and five representing three trade contractors (Solaglass – glazing, Ruddocks – electrical, and S D Samuels (Southern) – roofing). After the delegates had introduced themselves to the rest of the team, the facilitator gave an overview of the principles of partnering from the first workshop.

Abandon adversarial positions – To highlight the futility of traditional adversarial positions, the facilitator divided the delegates into two groups – client and designers in one, and main contractor and trade contractors in the other – and asked them to identify their aims for the project and problems they believe the other party is responsible for. A familiar list of bad experiences emerged (see page 3). Yet despite their apparently opposing positions, it became obvious that by working together on a common agenda they could achieve their individual aims.

Anticipate problems – The delegates voted to determine three critical problem areas. They then divided into three mixed groups to find solutions to these critical problems, and decide who needed to take action. When they reported back, their views were combined (see table, below).

Delegates volunteered for actions and reports at the next workshop.

Problems	Solutions
Lack of information, unrealistically short programme, and weak commitment to programme.	■ Short-term programme with updates issued early ■ Early involvement of the right people ■ Co-ordinating project management ■ Commitment to deadlines ■ Use of information release schedules regularly ■ Regular fortnightly meetings.
Financial creep due to poor co-ordination of processes.	■ Interface between trades – immediate meeting with the design team to resolve ■ Information flow – drawing issue schedule ■ Use of IT to improve information flow ■ No client/design team changes ■ Immediate confirmation of the design brief.
Lack of supervision, quality of employees.	■ Continuing communication on information, safety and programme ■ Pre-site induction for French Kier and subcontractor staff – technical/safety/quality.

WORKSHOP 3

6 weeks after start on site

Self-assessment score = 1.7

Agenda

Introduce new delegates

Report solutions to problems from workshop 2

Further anticipated problems

Self-assessment

WORKSHOP 4

15 weeks after start on site

Self-assessment score = 3.0

Agenda

Review programme

Cascading principles

Further anticipated problems

Self-assessment

Problem solving in a partnering culture

Workshop 3 was a problem-solving session, run over a half-day only. By now the mechanical contractor, R F Thomson, had joined the team. Nineteen delegates attended: four from Essex, five from Atkins, five from French Kier, and five delegates from four trade contractors.

The starting point was the problems identified at the second workshop. Delegates reported on solutions being implemented around security, interior design, site access, site facilities, safety, publicity and commissioning building services.

Delegates divided into client, designer and constructor breakout groups to identify new problems and reconvened to collate them into a single set. They concluded that the main issues were financial, late design, security, resources, kitchen design, and quality. Delegates were also put into mixed groups to brainstorm solutions, following the process as described previously. Actions, responsibilities and completion dates were agreed.

Cascade partnering principles

The fourth workshop focused on how the supply chains were taking up the principles of partnering being applied in the supply team. Fourteen delegates attended workshop 4: two from Essex, two from Atkins, five from French Kier, and five delegates from the four trade contractors.

French Kier's review of the programme showed the project about two weeks ahead of programme. And Atkins reported that the expenditure profile was on course. About half of the work packages had been placed. The site was considered to be very tidy and had achieved a high score with the Considerate Constructors Scheme (www.considerateconstructorsscheme.org.uk). Delegates reviewed problems identified at the previous meeting: cost control reporting, compensation events, design variations, furniture and equipment, service runs, labour and resources.

The roofing subcontractor reported that he had arranged a workshop for his labour force to explain how the partnering agreement was pioneering a new approach. He also flagged up a delay in the supply of materials. He admitted that usually in this circumstance, he would visit the site and identify (or invent) a reason for delaying delivery, such as the steelwork not being ready. However, when he explained the partnering agreement to his supplier, they agreed to supply the next grade of roofing material at the same cost to keep the school on programme. The mechanical and electrical contractor had also told his staff about the special nature of the project.

The cladding/glazing contractor said he often spent a lot of time on projects 'doing all those confrontational things' but thought this project, even if difficult, was worth investing time in to see it through, particularly if it would lead to future work. He said his file of correspondence was already thinner than usual.

Atkins's quantity surveyor said that he could now see how additional design input from the cladding/glazing subcontractor would have been valuable, and that he found this new way of working 'a culture shock'.

The delegates then went into client, designer and constructor breakout groups to identify problems and then into mixed groups to find solutions as they had done in previous workshops, and produced another list of anticipated problems and solutions.

Behaviour changes

- Prepare open and honest costings.
- Work to minimise over runs.
- Involve trade contractors in design.
- Raise problems early.
- Work proactively with utilities.
- Anticipate factory shutdown periods.
- Keep talking to change attitudes.

WORKSHOP 5

23 weeks after start on site

Self-assessment score = 3.5

Agenda

Review programme

Lessons learned

Identifying lessons

With the hand over only weeks away, this fifth workshop was designed to get delegates' views on what they had learned about partnering and to feed back suggested changes that others could make. Twelve delegates attended workshop 5: one from Essex, five from Atkins, four from French Kier, and two trade contractors.

The views of the client, contractor and designer are summarised in the 'Point of view' panels distributed through this case study.

There was broad agreement about the need for more up-front workshops, better client briefing, more time for design, and ring fencing overheads and profit (see Shared opinions, page 15).

WORKSHOP 6

30 weeks after start on site

Self-assessment score = 3.7

Agenda

Review programme

Design appraisal

Team performance

Finished product

Self-assessment

Post-project review

Fourteen delegates attended workshop 6: four delegates from Essex, four from Atkins, five from French Kier, and one trade contractor. Construction was about one week behind schedule, partly due to the mechanical services because the M&E contractor (who was not at the workshop) was giving priority to schools due to open at the beginning of the school year. Oakfields was due to open a term later.

In a discussion about interfaces, the roofing contractor said he preferred the way the architect had provided the principles so that he could then complete the details. He gave, as an example, the junction between the walls and roof. French Kier's quantity surveyor (QS) reported a provisional outturn cost about £13k under the target, but invoices were still flowing in. Claims and subsequent variations would be minor. He added that with the traditional procurement route without partnering the project would be in a claims situation.

The design – The team's impression of the design focused on function, environment and buildability.

Atkins's QS reminded delegates that the design was a model that arose from a value engineering exercise. The roofing contractor was very positive about the outcome and was going to include it in his product brochure. He said that not every detail could be fully anticipated until the building was on site.

Strengths	Weaknesses
Strong design	Expensive detailing, could have been simpler
Spatially excellent	Poor buildability, poor interfaces
Sense of light and space	Greater attention to detail needed
Functional	High cost of roof and steelwork
Operationally effective	More thought needed on M&E service routes.
Good basic design.	

The construction – Views on the performance of the contractors were almost universally positive. Colleagues praised them for being "keen to resolve issues, friendly and professional" and "genuinely willing to embrace the new way forward" with a good team of site operatives.

The finished product – Delegates were then asked their views on the physical outcome as distinct from the people and processes. Responses ranged from "light, airy and pleasing" to "too much volume and too many interface details".

Best value – In a round-table discussion, delegates were asked whether and how the team had given value for money. The partnering ethos clearly influenced their responses. (see How to achieve best value).

Shared opinions

- If the second workshop had been earlier, a better design would have arisen from collaboration with trade contractors.
- Make time for briefing by project originators.
- The short contract period limited contractor's ability to influence the design.
- Fixing preliminaries and profits would encourage the team to focus on cost savings without risking own profit.

How to achieve best value

- Anticipate and solve problems as a team.
- Give the client accurate costs with no hidden extras and claims.
- Keep the process open and don't conceal problems.
- Welcome client involvement throughout.
- Challenge initial solutions.
- Wrap up construction quickly so the client can focus on operations.

WORKSHOP 7

1 week after on school opened

Agenda

How partnering benefited the school

Customer satisfaction

Did partnering work?

This final workshop had eleven delegates, including the head teacher.

The facilitator posted a list of 13 aims taken from the Partnering Charter. He gave each delegate a strip of 10 stickers and asked them to place these against the aims they felt were best achieved. More than one sticker could be allocated to any of the aims.

Then the facilitator asked the delegates to write on a card one thing they thought could have been done better. Four common answers emerged (see Ideas to carry forward, page 17). The consensus view was that inexperience with partnering was the barrier to higher achievement.

Customer satisfaction – Finally, the head teacher and Essex delegates were asked to rate the product and service on a 10-point scale.

Aims from the partnering charter	Ranked scores
Think of the end user	19
Common purpose acting as a single team	14
Open and frank communication focusing on solutions not problems	13
Integrated balanced design	12
Work to programme/achieve by due date	10
No accidents	8
No complaints from neighbours	8
Satisfaction as individuals in our job	7
Quality right first time	7
Value for money	6
Environmental sensitivity	5
Make a profit	1
Repeat business	1

Satisfaction with product		Satisfaction with service	
Classrooms	8	Does the design do what you want?	7
Hall	8	Have we told you about the building systems?	8
Kitchens	5	Did we respond to your queries satisfactorily?	8
Administration spaces	7	Did you have enough input into the design?	7
Acoustic performance	8	Is everything relevant to your requirements?	8
Comfort/environmental control	7		
Equipment and fittings	8		
Landscaping	8		
Access and parking	8		
External areas	8		
Ease of maintenance	7		
Energy efficiency	8		

The team was disappointed in the low score for the kitchen, despite the special attention it was given. School kitchens are notoriously difficult to get right first time.

Ideas to carry forward

- **Earlier trade contractor input to design would have led to better co-ordination.**
- **The cost could have been reduced further had there been more time for contractor input.**
- **Simpler details would have improved the design.**
- **More and earlier consultation with end users would have produced an even better result (for example the kitchens).**

Point of view

Neil Carpenter
Partnering Adviser, Atkins

I noticed how designers and contractor took joint responsibility for dealing with problems and defects. The client became accountable to the team for fixing layouts so as not to delay the programme.

It is obvious now that although we made great efforts to integrate the trade contractors into the team, they came in too late for us to gain the maximum benefit from their experience.

The target cost method, open-book accounting and quick dispute resolution seem to have satisfied everyone, especially the sub-contractors whose payments can so often get delayed because of claims and disputes.

There can be a tendency in new partnering situations for shared objectives to be confused with cosy ways of working. But just because you are partnering you cannot let go of your professional responsibilities.

INTERVIEWS

1 month after school opened

On reflection

A month after completion, the key participants – Essex, Atkins and French Kier – were interviewed by Eclipse Research Consultants about the partnering arrangements and how this project compared with past projects.

Essex County Council participants were convinced that partnering on this project helped to avoid those aspects of traditional procurement that are unhelpful and disliked, and that on all counts partnering is at least as good as traditional procurement. However, senior management time has been incurred attending the Partnering Workshops. And bringing in a partnering adviser from Atkins to manage the partnering process has incurred fees.

The Atkins project manager compared Oakfields favourably with disliked experiences on past projects. In particular he thought that integrating the contractor and trade contractors into the design team did help the designers to identify some simple low-cost details. But for the project to gain the maximum benefit from their experience, they really should have joined the workshops earlier. One week before construction started was too late.

The contractor's views are generally positive, although they held some reservations. There were buildability issues that could have been resolved more successfully through earlier engagement. They noted the absence of a contractor in the initial value engineering exercise and believed they could have added considerable value.

QUESTIONNAIRE

6 months after school opened

Thirteen members of Oakfields staff responded to a questionnaire survey, six months after the school opened. They were asked about positive or negative qualities of the school, with knowledge of the assessment that the project team had done.

With minor exceptions, the staff agreed with the construction team's positive assessment – that the school was light, pleasing, clean, modern, airy, crisp, different, of good quality, and innovative.

Overall, school staff said the building impresses visitors and is a pleasant working environment. The paired classrooms are liked, there is adequate storage, the foyer was ideal for meetings, and the design is energy efficient and secure.

Their responses reveal a marked difference in how the constructors and users saw the school. The project team had worked at improving the buildability (the ease of physically putting the elements together), yet none of these issues appealed to the users. They were solely interested in usability (the ease of using the building as a school).

It is important to see the outcome in context; the model school was experimental and the time allowed for design and construction was compressed. Nevertheless it highlights the need for appropriate consultation processes with stakeholders – the teachers, pupils, parents and the local community.

Point of view

Michael Hindley
Educational Premises Manager,
Essex County Council

The workshops gave us an insight into the design and construction processes that we don't normally get. Having lived through it all, I'm convinced that partnering workshops are the answer to every construction client's plea: 'Bring me solutions, not problems.'

There was genuine focus on solutions, on revealing problems early and on designing them out. As a result, we were more satisfied than normal with the process and the product.

All this was achieved despite the fact that we allowed much less time for planning and designing this school than other schools, and that the programme for procurement was very compressed.

I agree with what others have said about spending more time consulting end users. This could be woven into the workshops if we knew who the key staff were going to be and they could be released to attend.

Help

Finding a facilitator

When selecting a facilitator, **facilitation skills** are the top priority. Look for training by a recognised provider and/or relevant experience. See *Facilitation made easy* for guidance on role and style. **Independence** is critical to earn the delegates' respect. Ideally a facilitator will be from outside the organisations involved, but if in-house they should not be actively involved in the project. **Subject knowledge** is more important if discussions will be technical.

When interviewing a potential facilitator, make sure that their **personal style** is to your taste and that you have confidence in their ability. As they are facilitating collaborative working, they must demonstrate **an ability to work with you as a partner**.

'How to' publications

A guide to project team partnering
(second edition, 2002) – ISBN 1 898671 21 4
Construction Industry Council, 26 Store Street, London WC1E 7BT, T 0207 637 8692

Effective teamwork
– a best practice guide for the construction industry
Constructing Excellence
www.constructingexcellence.org.uk
Helpdesk T 0845 605 5556

Facilitation made easy (2001)
Esther Cameron – ISBN 0 7494 3608 5
Kogan Page, Little Hampton Book Services (distributor)
T 01903 828 800

How to survive partnering – it won't bite
(The Housing Forum, 2000)
Constructing Excellence
www.constructingexcellence.org.uk
Helpdesk T 0845 605 5556

Integration Toolkit
Strategic Forum for Construction
www.strategicforum.org.uk

Background reading

Accelerating change (2002)
Strategic Forum for Construction
www.strategicforum.org.uk

Fact sheet on partnering (2003) Constructing Excellence
www.constructingexcellence.org.uk
Helpdesk T 0845 605 5556

NEC and partnering – the guide to building winning teams
(2001), John Bennett and Andrew Baird
– ISBN 0 7277 2955 1 – Thomas Telford Publishing
T 020 7665 2464

PPC 2000 and SPC 2000
(standard forms of contract for project partnering)
Association for Consultant Architects, T 020 8325 1402

Procurement routes for partnering – a practical guide
(2002), Jon Broome – ISBN 0 7277 3136 X
Thomas Telford Publishing, T 020 7665 2464

The NEC partnering option X12
Thomas Telford Publishing, T 020 7665 2464

Unlocking Specialist Potential (1998)
Martyn Jones and Mohammed Saad – ISBN 1 902266 00 5
Thomas Telford Publishing, T 020 7665 2464

Websites

Constructing Excellence – www.constructingexcellence.org.uk

Office of Government Commerce procurement guidance – www.ogc.gov.uk

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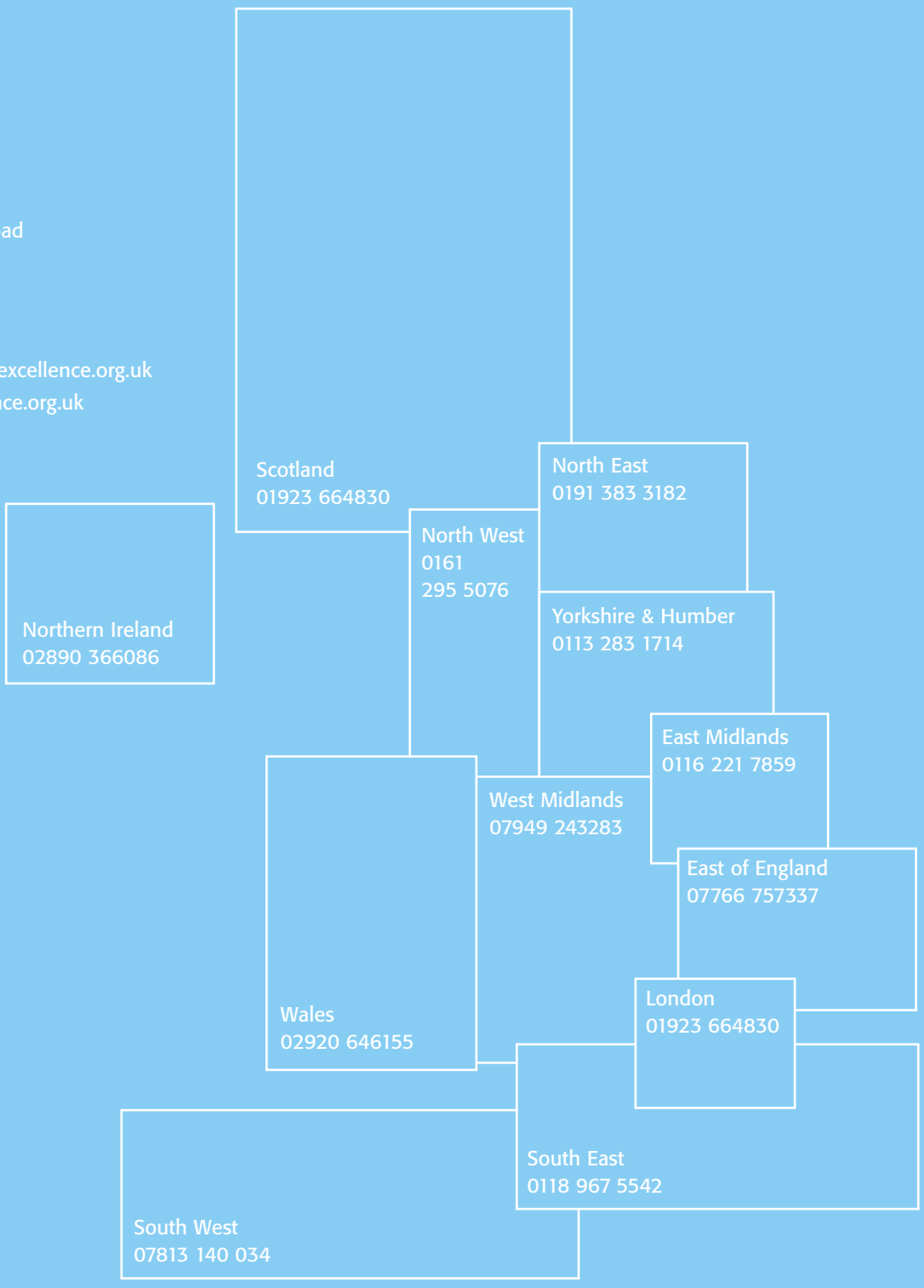

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