Effective Teamwork

A Best Practice Guide for the Construction Industry
Constructing Excellence is driving forward productivity improvements in the UK construction industry through a set of integrated programmes focused on delivering process, product and cultural changes.

The key objectives of Constructing Excellence are to improve performance through increased productivity and competitiveness; to improve the industry’s image by changing its culture, developing its people and engaging better with communities and customers; and to engage and take action with individuals, businesses, organisations and industry associations.

This guide demonstrates how teamwork can be an important tool in achieving Constructing Excellence objectives. Drawing from the management literature on teamwork, together with original research, the guide examines various aspects of setting up and managing teams, with practical examples from the construction industry and a useful team self-assessment tool.

Effective Teamwork was prepared for Constructing Excellence by Eclipse Research Consultants. For details of how to contact the authors see the inside back cover of this guide. Illustrations were by Gerry Armstrong (gerry.armstrong@virgin.net).

For more information about Constructing Excellence, please see:
www.constructingexcellence.org.uk
Or call our helpdesk on 0845 605 5556.
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Introduction

Construction is a collaborative activity – only by pooling the knowledge and experience of many people can buildings meet the needs of today, let alone tomorrow. But simply bringing people together does not necessarily ensure they will function effectively as a team. Effective teamwork does not occur automatically. It may be undermined by a variety of problems such as lack of organisation, misunderstanding, poor communication and inadequate participation.

This guide suggests ways in which construction teams can ensure they harness the collective energy of all their members. It has been written for those who lead, form or participate in construction teams and it applies to teams formed within organisations and those formed across two or more organisations.

The guide discusses why teamwork is important and the key issues people face when working collaboratively. Overall it aims to help team members work better together and address many of the inter-personal issues such as trust, respect and leadership that influence how people collaborate successfully. Actions teams can take to become more effective are suggested throughout the guide, together with illustrative case studies.

A self-assessment matrix is included on pages 10-11 to enable teams to identify the strengths and weaknesses of their approach. The matrix identifies six key elements for effective teamwork:

- Team identity
- Shared vision and team objectives
- Communication
- Collaboration and participation
- Issue negotiation and resolution
- Reflection and self-assessment.

Good practice guidance on each of these elements is provided on pages 12-17. The aim is to help teams make progress against each of the elements.
What is teamwork?

Teams are groups of people with complementary skills who are committed to a common purpose and hold themselves mutually accountable for its achievement. Ideally, they develop a distinct identity and work together in a co-ordinated and mutually supportive way to fulfil their goal or purpose. Task effectiveness is the extent to which the team is successful in achieving its task-related objectives. Shared goals are most likely to be achieved through working together and pooling experience and expertise.

Successful teams are characterised by a team spirit based around trust, mutual respect, helpfulness and – at best – friendliness.

Simply bringing people together does not necessarily ensure they will function effectively as a team or make appropriate decisions. Teams are composed of people who have a variety of emotional and social needs which the team can either frustrate or help to meet. Teamwork indifference – failing to take action to promote good teamwork – is a strategy likely to result in mediocre performance.

Effective teamwork results from:

- a team whose membership, size and resources match the task
- good leadership and attention to team-building
- commitment by team members to understand and identify with one another’s goals
- the development of team goals – a shared vision
- a sense of common ownership of the task at hand and joint responsibility for its achievement
- co-ordinated effort and planned sharing of tasks evenly across the team
- the open exchange of information within the team
- honesty and frankness among team members.

Effective teamwork may be undermined by a variety of problems, for example: disorganisation, poor communication, misunderstandings or inadequate procedures for problem-solving. Team functioning can be weakened by obstacles faced by individual members within the team, as well as by difficulties linked to the task.

Benefits of successful teams

- Improvements in participants’ confidence, attitudes, motivation and personal satisfaction
- greater clarity in expressing ideas through group discussion
- better understanding by individuals of the nature of their contribution – and of the needs of other team members
- more efficient use of resources – especially time
- greater optimism – by focusing on positive outcomes and putting less weight on problems
- a wider range of ideas rather than individuals working in isolation
- more effective responses to changes – improved trust and communication help a team to adapt to new circumstances.

Potential drawbacks of teamwork

So-called ‘group think’ can occur when a team is lulled into a false sense of satisfaction and loses its critical edge. Team members can waste time and energy in disputes and some members may opt out of the process – ‘social loafing’ – leaving others to do all the work. This can occur particularly when people feel they are dispensable.
Effective Teamwork

Selecting team members

Team members of high ability contribute most to a team when other members are also of high ability. However, in forming and managing a team, it is important to consider not only individuals’ technical skills, knowledge and experience but also their ability to co-ordinate actions and their interpersonal qualities.

In selecting potential members, it is important to look for people who will work constructively with others and have a willingness to grow and develop within the team. Preferably, team members will be selected who are able to:

- commit to a shared goal
- listen and respond to others in an objective and productive way
- take on different roles in the group in order to accomplish shared ends
- be open and honest with their ideas, concerns and values
- avoid carrying hidden agendas into team meetings.

Those unlikely to work well as team members are individuals who seek to maintain their position by protecting their experience or who prefer to work alone and unaided and are unwilling to discuss their assumptions, negotiate options or explain solutions.

Essex County Council Design workshops.

The council has used design workshops to launch some of its primary school projects. The workshops, which are held away from the council offices, bring together the education department, property services department, head-teacher, chairman of the governors and members of the design team (project manager, architect, structural engineer, mechanical and electrical services engineer, interior designer and landscape architect). The aims are typically strategic, rather than concerned with detail.

The workshops are carefully planned two-day events. Team members are chosen for their willingness to work in an interdisciplinary way and an experienced facilitator ensures the event meets its objectives. Break out sessions enable parallel working, with each group reporting back to the whole team regularly. At one workshop, the architect prepared modelling kits which each group used to explore options for the site and building layout.

The workshops have been highly successful in achieving a sense of ownership by the whole team and in helping to ensure that designs benefit from the combined expertise of all those present.
Leadership is critical to teamwork. The team leader is the person responsible for ensuring that members work effectively together to achieve their goal or objective and must facilitate the co-operation necessary for the team to perform well. The leader must also ensure that the team has the resources and information necessary to complete its task.

Overall the leader needs to:

- Create a supportive climate of openness, trust and mutual respect that promotes loyalty and co-operation and provides a ‘blame free’ culture
- Assist the team to forge a clearly articulated vision with clear objectives and goals
- Identify team goals and objectives that are compatible with individual members’ own goals
- Devise a workplan in which each member is allocated clearly defined tasks that are meaningful and challenging for that individual
- Gain commitment from team members to complete the task and, on occasion, inspire them “to go the extra mile”
- Ensure that all members feel their contribution is visible to, and valued by, the team as a whole
- Ensure there is regular, clear and accurate feedback to the team on its performance over time
- Be willing to share credit for the team’s successes with the entire team.

A confident and effective team leader looks to the team for answers and welcomes constructive challenges and suggestions for alternative courses of action. He or she needs to be able to deal with conflict constructively through the processes of mediation or negotiation. On occasion, the leader must be prepared to take difficult decisions and be willing to explain the basis on which they have been taken.

Socially, the leader should be aware of participants’ loyalties to people or organisations outside the team. Also, the leader has to be seen as a fair and impartial mediator of interpersonal issues, whose focus is on members co-operating to achieve goals. Without this ability, the leader will fail to gain the respect necessary to help team members.
Team meetings

Meetings provide face to face contact at regular intervals. They are valuable for both social and business purposes. The social value of meetings should not be underestimated – trust, respect, team identity and familiarity with one another’s ways of working are all developed here.

For business purposes, meetings include:
- Information-sharing among team members, leading to the team agreeing future actions
- Decision-making – including assessment of options as well as final selection
- Work allocation – identifying follow-up actions and responsibility for them.
It may be helpful to differentiate between these functions.

Meetings can be valuable as a deadline for individuals to produce information needed by others. They can also be a waste of time. If there are no overriding social reasons, meetings should be called only when decisions and actions are needed. Simply conveying information between team members is best undertaken through other routes.

A formal agenda circulated in advance will help to ensure team members are fully prepared and vital tasks are not overlooked. Supporting paperwork should also be distributed in advance, giving members sufficient time to absorb its contents and prepare their response. Failure to do so prevents the team from getting the full value from meeting time.

If it is deliberate, as a way of preventing the team having a proper debate, it will soon result in frustration and a loss of trust among team members. Minutes should be taken, with decisions and actions recorded, and distributed as soon after the meeting as possible. Those not present should be advised of meeting outcomes.

French Kier Anglia Partnering workshops

As main contractor for the construction of Oakfields School at Wickford, Essex, French Kier Anglia (part of the Kier Group) organised bi-monthly partnering workshops over the one-year construction period. The workshops, facilitated by the Managing Director of French Kier, were typically attended by up to 20 people involved in the project, from the legal client to key sub-contractors.

Each workshop was highly structured, yet informally run. At the first meeting, the main objective was to prepare a Partnering Charter. After round-table introductions the workshop was carefully managed to allow everyone present the opportunity to make a contribution to the Partnering Charter.

Subsequent workshops were run along similar lines – a mixture of plenary sessions and breakout groups. The workshops were used to report progress, anticipate problems before they arose, identify solutions and finally implement them. Ten goals were identified, including ‘no accidents’, ‘no complaints’, ‘adhere to programme’, ‘flag up problems at the earliest opportunity’, ‘propose solutions’, ‘think of the end user’ and ‘act as one team’. At the end of each workshop, the team rated itself against these goals.

As a result of the partnering approach, the school was completed on time, on budget, with no disputes and no surprises. All participants were positive about both the process and the product. An independent survey of the school’s users showed high levels of satisfaction with the completed building.
Chairing team meetings

Chairing a meeting is a key skill for a team leader. A chairperson at a meeting will ensure every agenda item is covered and keep the meeting to time, bringing it to a timely conclusion rather than just letting participants drift away towards the end. Excessively long meetings with insufficient refreshment breaks can lead to fatigue and loss of attention amongst participants.

Effective chairmanship involves ensuring all members have the opportunity to participate, particularly those who are unaccustomed to anticipating problems and who may not push their own views forward unsolicited. Time should also be set aside in meetings to raise issues not on the agenda.

The chair of the meeting should ensure a method is established to document issues raised, to record decisions made, to identify actions required and to list who is to be responsible for each action.

Commencing and closing meetings are both important. Launching straight into the agenda as soon as members arrive and closing without any kind of review, can act against team identity. The start of a meeting is an opportunity for new participants to introduce themselves, for a reiteration of the 'mission', a recap of project objectives and deadlines and a summary of progress so far. These actions will help to re-acclimatise the group to working as a team. They are a reminder that each person is necessary to complete the task and is dependent on, and accountable to, the rest of the group. They help members to focus afresh on the project in hand – which may be particularly valuable for those who are simultaneously engaged on other projects.

Closing a meeting by re-stating its purpose, summarising the decisions made and the future actions required, will bring it to a natural end. Well-chaired, business-like and highly productive meetings raise enthusiasm and satisfaction among team members.
The effective teamwork matrix

The teamwork matrix opposite has been devised to help teams to assess themselves against best practice. Simple and quick to use, it has been piloted successfully with more than 200 users from various disciplines within construction and refined over a period of two years.

What is the purpose of the matrix?
This matrix will help assess the effectiveness of your teamworking practices. The column headings identify six key aspects of effective teamwork. The rows represent levels of progress towards best practice – with level 0 the lowest.

How to complete the matrix
Decide which column to start with, then find the cell which best describes your teamwork practices. Mark this with a cross. Do this for each of the columns. Joining the crosses will give you a profile of team effectiveness. It will help you to assess the balance of your team management and to identify which aspects of teamwork could be improved.

How to interpret the profiles
The examples show a balanced matrix and an unbalanced one. Peaks indicate where team management is well-developed, troughs where there is still scope for improvement. Good balance at high levels in every column is an indication that your team is well managed.

The guidance on pages 12-17 of this guide addresses each of the column headings and suggests actions to make your team more effective. Taking these actions will help your team to improve its teamwork profile.

When to use the matrix
As described on page 17, a team that takes time to think consciously about its teamwork practices will be more effective. The matrix is intended to help teams be self-reflective.

Reflecting on the process of teamwork should be a periodic, rather than frequent, activity. Completing the matrix is therefore an activity to be undertaken occasionally.

What to do next
Drawing the profile may give your team new insights into teamwork and help you to identify areas for improvement.

Comparing individual members’ matrix assessments with one another will reveal areas of agreement and disagreement about how well the team is working together.

Drawing profiles periodically can be used to measure changes in teamworking practices over time. Here, it is probably best to agree a profile for the team as a whole each time the assessment is made. This is best done by a round table discussion about progress against each of the six columns. Ideally, the profile will improve over time towards best practice.

If a team makes a conscious decision to improve its teamworking practices, then an initial way to do so is to select one of the column headings for attention. Typically this should be the lowest-rated column, since part of the aim of the matrix is to encourage a balanced profile across all the columns.
## Innovation - Best Practice - Productivity

### The team regularly reviews members’ roles and their impact on the team and acts on the outcome

| Level 4 | The team takes ownership of the problem and accepts joint responsibility for its achievement |
| Level 5 | The team recognises that its members have individual and team goals and tasks are framed accordingly |
| Level 2 | The focus of the team is on the tasks that individual members need to solve |
| Level 1 | Team members take limited interest in issues that lie outside their own immediate area of responsibility |
| Level 0 | Team members concern themselves only with their own responsibilities |

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<th>Collaboration and participation</th>
<th>Issue negotiation and resolution</th>
<th>Reflection and self-assessment</th>
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<tr>
<td>The team takes ownership of the problem and accepts joint responsibility for its achievement</td>
<td>The team has a shared vision and set of objectives, developed collaboratively and regularly reviewed</td>
<td>Team members actively and openly share their knowledge and ideas around the whole team</td>
<td>Familiarity, honesty, mutual trust and full participation harness the collective expertise of the team</td>
<td>Divergent views are welcomed as a source of energy and a spur to the team’s creative problem-solving</td>
<td>The team regularly reviews members’ roles and their impact on the team and acts on the outcome</td>
</tr>
<tr>
<td>The team recognises that its members have individual and team goals and tasks are framed accordingly</td>
<td>The team has developed for itself both a shared vision and clear objectives</td>
<td>Team members communicate information and knowledge freely around the team</td>
<td>All members are given opportunities to contribute and build on suggestions from others</td>
<td>Sources of disagreement are addressed openly and resolved head-on through constructive negotiation</td>
<td>The effect on the team of each member’s different roles and responsibilities is clearly recognised and discussed</td>
</tr>
<tr>
<td>The focus of the team is on the tasks that individual members need to solve</td>
<td>The whole team is working to a set of common objectives</td>
<td>Team members communicate information when others need it</td>
<td>The team seeks ideas, proposals and solutions from all its members</td>
<td>Team members are prepared to explain their underlying assumptions and negotiate options</td>
<td>Different roles and responsibilities are discussed from time to time</td>
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<tr>
<td>Team members take limited interest in issues that lie outside their own immediate area of responsibility</td>
<td>Members of the team are clear about their own objectives but the team has no shared vision</td>
<td>Individuals are protective of their own information and share it reluctantly in response to specific requests</td>
<td>Team members prefer to work alone and give more priority to their own concerns than to those of the team</td>
<td>Contentious issues are skated over or avoided completely; conflict is dealt with only superficially</td>
<td>The team acknowledges its members have several roles and responsibilities but they are not reviewed</td>
</tr>
<tr>
<td>Team members concern themselves only with their own responsibilities</td>
<td>Team members, both individually and collectively, lack a common vision and clear objectives</td>
<td>Information is passed to team members strictly on a ‘need to know’ basis</td>
<td>Insularity, lack of trust or power struggles reduce participation and collaboration</td>
<td>Conflicting opinions remain unaddressed and consequently slow progress</td>
<td>The team places no value on considering and negotiating how they work together</td>
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You may photocopy the matrix and distribute it among your team members.
How a team behaves and what it achieves is a result of the collective behaviour of its members. It may be difficult to understand how a team works in detail. However, it can be helpful to think of a team as an amalgam of the personalities, abilities, values, motivations, loyalties and commitment of all members, together with the pressures and constraints placed on them by their task and organisational environments. People and groups acting outside the team play a part in shaping how the team and its members behave. Not surprisingly, effective teamwork faces many challenges.

A key way to help individual members to work together is to encourage them to think of themselves as a unit with a clear identity, that accepts responsibility for, or ownership of, the task at hand and in which the members hold each other accountable for delivering the solution. In turn, this will help to raise individuals’ commitment to their common task.

Ideally, participants come to place the good of the team before their own interests or ambitions, or those of their own organisation or discipline, while still recognising their continuing affiliations both within and outside the team. They develop pride and loyalty to the group and support each other.

Stability and consistency of core team membership for the duration of a project help to support team identity and cohesiveness. Often, changes to membership are at the discretion of those outside the team and arise from commercial or project pressures. Understandable though such changes are, sacrificing an established team can generate additional downstream costs arising from: bringing new team members ‘up to speed’, plugging gaps in expertise that can open up when team membership changes and dealing with any antagonism that results from the changes.

**Practical steps to promote team building and team identity**

Encourage regular contact among team members, particularly where they are drawn from different offices or organisations:

- Co-locate team members and team leader, ideally all in an open plan office
- Put a representative into each others’ offices to co-ordinate and resolve problems
- Hold team-building lunches, awayday workshops or social events
- Arrange individual and/or group visits to each others’ offices, factories or sites.

**Encourage information sharing:**

- Organise well-facilitated team workshops to focus on sources of conflict and how to resolve them, on each member’s aspirations and expectations, on the implications of being a team member and on the benefits from improved practices
- Ensure regular reporting from each member of what they have been doing between meetings
- Use electronic mailing systems so every team member has access to all project information.
Shared vision

Most people perform better when they have a clearly defined ‘future state’ to work towards – a vision of the future as the focus for their efforts. Similarly, a team will perform better if it takes time to develop a shared vision. The vision should motivate and inspire team members, commit them to the task and convince them that it will be achieved more successfully if they work together rather than as individuals.

Teams are more motivated to deliver a vision they themselves have developed because the vision has its roots in their own values, skills and beliefs, rather than coming from outside. When team members feel they have made a real contribution to a significant, challenging and attainable vision, they feel a sense of ownership and are likely to work hard to co-operate and achieve it. The extent to which it is shared depends on how it has been negotiated.

A team vision is often quite loosely defined. A mission statement, on the other hand, emerges from the team’s vision and captures it in clear and coherent terms. Typically it will express in a short, motivating form of words the principal elements of the team’s vision. Ideally, all team members will express the same vision and the same arguments in its favour. Team meetings are an opportunity for a periodic reminder of the team’s vision and for reviewing its continuing appropriateness.

Underpinning the team’s vision and the mission statement, will be a set of goals for the team to meet. These need to be stimulating and challenging, yet also attainable. Unattainable goals may have a demotivating effect.

Individual members need to have objectives and clear targets. These, also should be stimulating and challenging, yet attainable. An overall action plan for the whole team places the team members’ objectives and targets on a common basis to ensure they are mutually compatible and consistent with the overall objectives.

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**Shared visions**

Shared visions may vary widely but typically could be concerned with one or more of the following:

- A commitment to excellence and effectiveness in the project – right first time, on time and to budget
- Efficient and sustainable use of scarce resources through minimising waste
- Respect for stakeholders, such as the construction team and neighbours on adjoining sites
- Customer focus – improving the business effectiveness of the client and/or the quality of life of occupants.

**Practical steps to achieve a shared vision**

- Bring all project parties to a meeting or an awayday workshop devoted to the development of a shared vision, including a mission statement and formal objectives
- Identify individual tasks and responsibilities and define a plan with deadlines, actions and objectives for each team member
- Keep the action plan itself under review for its continuing relevance, adequacy, and accuracy
- Assess and reaffirm or revise the shared vision periodically.
Communication is the process of transmitting and understanding information and ideas so the team develops shared understanding. Good communication between members is essential if a team is to collaborate successfully and make best use of its pooled knowledge. Team identity and group cohesiveness benefit from good communication. Conversely, lack of communication – where members work too much on their own and lose touch with how their work relates to others – can reduce team effectiveness.

Open communication and information sharing:
- help team members to anticipate what they can expect from one another and when they can expect it
- eliminate surprises and make it easier for members to work together
- engender trust and familiarity among team members
- allow more forceful group behaviour, including the willingness to question and challenge in the search for better solutions.

Shared understanding means that both the person who sends a message and the receiver interpret the message and the actions it implies, in the same way. This requires:
- expressing ideas clearly and using body language – relaxed posture, good eye contact and occasional pauses – to show feedback is welcome
- being flexible enough to take on board others’ suggestions and to build on others’ ideas
- between team meetings, keeping all those who need to know regularly informed of individual progress.

Listening is just as important as speaking and involves paying attention to the whole of the sender’s message and seeking to interpret it from the perspective of the sender. Body language can be used to show full attention and interest. Restating the message in your own words to clarify the sender’s intended meaning can be helpful. To seek constructive clarification, ask supportive questions focused on what, where, how and why issues. This allows the speaker to explain the position in more detail.

Practical steps to promote open communication
- Highlight the importance of open communication and the mutual benefits for the team
- Set objectives – don’t let the team just talk around the job
- Remind team members of the importance of arriving at meetings prepared to communicate ideas and use drawings and diagrams where appropriate
- Recognise that not all are good communicators – others on the team should help them to articulate their views
- Ensure everyone has the opportunity to make a contribution or air a grievance
- Try to ensure everyone listens
- Organise discussions with all team members about the best ways to communicate with others: face to face, email, web, telephone; and whether line, star, or circular. Most benefit comes from discussions that make people feel their views are valued
- Encourage a ‘direct line’ approach – with direct communication between parties involved in a decision
- Copy information to all those who need to be kept informed.
Collaboration and participation

Collaboration works best when team members share values and vision, develop a team spirit, absorb the information they need to perform their task and learn to work well with each other. Trust, honesty, mutual respect and full participation are vital. Team members need to know that when they pass the ball their team mates will not drop it. In effective teams, members do whatever is needed to get the job done. They keep their ultimate goals and objectives in mind. If they fall behind, everyone pitches in to help the group get back on schedule. On less effective teams, members work independently and do not concern themselves with tasks outside their area.

In newly formed teams made up of relative strangers, there is a greater tendency to defer to age or seniority and less willingness to challenge views and ask for explanations. While such deference has its place – if it is to expertise and experience – the most effective decisions usually emerge from challenge and negotiation. Greater trust and familiarity between team members can allow more forceful group behaviour, more willingness to question in the search for better solutions and, ultimately, better outcomes. Team members are most open to information from those they feel are their equals.

Practical steps to promote collaboration

- Consider taking the team on a retreat to allow open discussion of issues in an informal setting – this will build in a social dimension to collaboration
- Encourage the team to recognise that the project is not just one person’s endeavour
- Focus on solutions, not problems, and emphasise that reaching a solution quickly is to everyone’s benefit
- Ensure all team members have the opportunity to contribute
- Encourage team members to leave their home discipline at the site entrance/meeting room door and enter as experienced and skilled individuals
- Encourage and/or facilitate a climate in which participants build on others’ suggestions without concern for a particular area of expertise.

AMEC Design training workshops

AMEC Design is committed to interdisciplinary teamwork from the very early stages of design projects. AMEC regularly runs two-day ‘Designing Together’ workshops as part of its staff development programme. Held at a training centre and led by an experienced facilitator, the aims of the workshops are to promote understanding of the various skills owned by the different professions, to develop presentation and teamworking skills and to provide an environment where innovation can be explored without risk.

Typically, fifteen designers attend, working together in three interdisciplinary teams. The teams are set a problem that demands input from all of the professions represented. A review of the proposals is undertaken at the end by senior AMEC staff, though the emphasis is on the process of teamwork, rather than its products. During the course of the workshop, personality types are discussed, negotiating skills developed and the different roles needed to construct an effective team are explored.
Differing views and opinions among team members are inevitable. Bringing together contrasting points of view is one of the strengths of a team approach. Ideally the team will welcome divergence and treat its members’ expertise and experience as a source of energy and an opportunity for creative problem-solving. The risk of disagreement should not be allowed to discourage team members from making constructive suggestions.

Disagreements can arise from:
- disputes over scarce resources
- ambiguities about responsibilities and/or deadlines
- power struggles, when people compete for a particular role in the team, such as a leader or ideas-person, progress-chaser or critic
- different expectations, ambitions or priorities
- misunderstandings and poor communication.

Confrontational responses and a ‘blame culture’ may undermine the team. Interpersonal conflict – disagreements between individuals – can become destructive.

Identifying and resolving issues is an important part of the team process and it is important to tackle the causes, not just the symptoms. Poor communication is often a major cause of conflict and the team should encourage communication, negotiation, information-sharing and co-operation. If communication is adequate and opinions can be freely expressed, apparently uncontrolled conflict often disappears.

The team should also encourage members to:
- discuss competing views, personal preferences, opinions, values, priorities and team roles openly
- separate out assumptions from facts and explain the reasoning behind their views and decisions
- avoid confrontational responses and be non-judgemental of others’ opinions and assumptions
- avoid recriminations if initial ideas or guesses, given in good faith, subsequently need to be revised.

**Practical steps to promote issue resolution**
- Acknowledge that conflict is acceptable, even valuable, when it is dynamic, robust and controlled
- Use constructive questioning to identify the causes of conflict, for example, non-delivery due to lack of expertise/resources, and to help identify potential solutions
- Try to insist on a blame-free culture by getting the team to focus on joint team solutions
- When problems arise, bring the team together to assess every different competing option and produce the best overall solution – taking shared responsibility for its implementation
- Allow all team members to contribute fully
- Call a gathering of the entire team to identify the sources of conflict and to allow frustrations to be aired
- Consider ‘off the record’ meetings, and/or workshops
- When conflicts are resolved, celebrate the success of the resolution.
Reflection and self-assessment

Teams often focus exclusively on the task at hand and only rarely on the process of teamwork. There may even be resistance on the part of team members to the notion of self-evaluation and self-examination. But there is value in stepping back in order to examine and reflect on existing ways of doing things. Regular reviews can lead to greater awareness of strengths and skills, as well as weaknesses and problem areas, so they are a useful way of ensuring a team’s continuing effectiveness.

A good place to start is with what teamwork means to each of the team members. Defining teamwork can help to shape how team members work together to set common expectations. Although the team may choose not to use the self-assessment matrix on page 9, group discussion could range across the topics raised by the matrix:

- Is the size, composition and capability of the team well matched to the task?
- Do team members see themselves as part of a single unit with joint responsibility for the task at hand?
- Has the team identified for itself a challenging shared vision and is it committed to its delivery?
- Is communication effective within the team and with others beyond the team?
- Is there trust, respect and full participation by all members?
- Does the team have a constructive team approach to issue resolution?

The team should consider whether it has a cohesive, supportive and positive social climate that provides adequate support for skill development, training and personal development.

As for the task itself, the team should review periodically:

- The original objectives and whether they have changed, or will change in the future
- How best to achieve current and future objectives
- The adequacy of the team’s methods of working to achieve current and future objectives
- Whether the team’s outputs meet or exceed the standards expected
- Whether milestones and deadlines are being met.

Practical steps to promote reflection and self-assessment

- Agree at the start ‘What shall we review when assessing how we’ve performed?’
- Review the teamwork process regularly, potentially at every meeting
- Reflect on the process as a team
- Try to make sure everyone is honest in the feedback reviews. Apply “Chatham House Rules” that statements go no further than team members themselves
- Hold close-out reviews – to understand what went on, what worked, what didn’t. The team should ask itself: ‘Did we do well as a team?’
Further reading

Adair, J. *Effective Teambuilding: How to Manage a Winning Team*  

Belbin, M. *Team Roles at Work*  
Butterworth-Heinemann, Oxford, 1993

Durcan, J. & Oates, D. *The Manager as Coach: Developing Your Team for Maximum Performance*  

Heller, R. *Managing Teams*  

Jones, S. *The Human Factor: Maximising Team Efficiency Through Collaborative Leadership*  
Kogan Page, London, 1992

Katzenbach, J. R. & Smith, D. K. *The Wisdom of Teams*  

McGrath, M. *Multi-Disciplinary Teamwork*  
Avebury Press, Aldershot, 1991

Muir, T. & Rance, B. *Collaborative Practice in the Built Environment*  
E&FN Spon, London, 1995

Neumann, J. E., Holti, R. & Standing, H. *Change Everything at Once!*  

Syer, J. & Connolly, C. *How Teamwork Works: the Dynamics of Effective Team Development*  

West, M. *Effective Teamwork*  
British Psychological Society, Leicester, 1994

Spence, R., Kirby, P. & Macmillan, S. *Interdisciplinary Design in Practice*  
Thomas Telford, London, 2001

Strategic Forum for Construction Integration Toolkit  
www.strategicforum.org.uk
This action guide for those who lead, form or participate in construction teams, has been prepared for Constructing Excellence by Eclipse Research Consultants, Cambridge. The guide is based on two research projects carried out by Eclipse in conjunction with the Department of Architecture at the University of Cambridge.

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Eclipse Research Consultants can be contacted at smacmillan@supanet.com
For more information about Constructing Excellence, please see:
www.constructingexcellence.org.uk
or call our helpdesk on 0845 605 5556.