Groups that Work

by Gerard M Blair

Groups form a basic unit of work activity throughout engineering and yet the underlying process is poorly managed. This article looks at the basics of group work and suggests ways to accelerate development.

In the beginning, God made an individual - and then he made a pair. The pair formed a group, together they begat others and thus the group grew. Unfortunately, working in a group led to friction, the group disintegrated in conflict and Caian settled in the land of Nod - there has been trouble with groups ever since.

When people work in groups, there are two quite separate issues involved. The first is the *task* and the problems involved in getting the job done. Frequently this is the only issue which the group considers. The second is the *process* of the group work itself: the mechanisms by which the group acts as a unit and not as a loose rabble. However, without due attention to this process the value of the group can be diminished or even destroyed; yet with a little explicit management of the process, it can enhance the worth of the group to be many times the sum of the worth of its individuals. It is this *synergy* which makes group work attractive in corporate organization despite the possible problems (and time spent) in group formation.

This article examines the group process and how it can best be utilized. The key is that the group should be viewed as an important resource whose maintenance must be managed just like any other resource and that this management should be undertaken by the group itself so that it forms a normal part of the group's activities.

What is a Group?

A group of people working in the same room, or even on a common project, does not necessarily invoke the group process. If the group is managed in a totally autocratic manner, there may be little opportunity for interaction relating to the work; if there is factioning within the group, the process may never evolve. On the other hand, the group process may be utilized by normally distant individuals working on different projects; for instance, at IEE colloquia.

In simple terms, the group process leads to a spirit of cooperation, coordination and commonly understood procedures and mores. If this is present within a group of people, then their performance will be enhanced by their mutual support (both practical and moral). If you think this is a nebulous concept when applied to the world of industry, consider the opposite effect that a self-opinionated, cantankerous loud-mouth would have on your performance and then contrast that to working with a friendly, open, helpful associate.

Why a Group?

Groups are particularly good at combining talents and providing innovative solutions to possible unfamiliar problems; in cases where there is no well established approach/procedure, the wider skill and knowledge set of the group has a distinct advantage over that of the individual.

In general, however, there is an overriding advantage in a group-based work force which makes it attractive to Management: that it engenders a fuller utilization of the work force.

A group can be seen as a self managing unit. The range of skills provided by its members and the self monitoring which each group performs makes it a reasonably safe recipient for delegated responsibility. Even if a problem could be decided by a single person, there are two main benefits in involving the people who will carry out the decision. Firstly, the motivational aspect of participating in the decision will clearly enhance its implementation. Secondly, there may well be factors which the implementer understands better than the single person who could supposedly have decided alone.

More indirectly, if the lowest echelons of the workforce each become trained, through participation in group decision making, in an understanding of the companies objectives and work practices, then each will be better able to solve work-related problems in general. Further, they will also individually become a safe recipient for delegated authority which is exemplified in the celebrated right of Japanese car workers to halt the production line.

From the individual's point of view, there is the added incentive that through belonging to a group each can participate in achievements well beyond his/her own individual potential. Less idealistically, the group provides an environment where the individual's self-perceived level of responsibility and authority is enhanced, in an environment where accountability is shared: thus providing a perfect motivator through enhanced self-esteem coupled with low stress.

Finally, a word about the much vaunted "recognition of the worth of the individual" which is often given as the reason for delegating responsibility to groups of subordinates. While I agree with the sentiment, I am dubious that this is a prime motivator - the bottom line is that the individual's talents are better utilized in a group, not that they are wonderful human beings.

Group Development

It is common to view the development of a group as having four stages:

- Forming
- Storming
- Norming
- Performing

Forming is the stage when the group first comes together. Everybody is very polite and very dull. Conflict is seldom voiced directly, mainly personal and definitely destructive. Since the grouping is new, the individuals will be guarded in their own opinions and generally reserved. This is particularly so in terms of the more nervous and/or subordinate members who may never recover. The group tends to defer to a large extent to those who emerge as leaders (poor fools!).

Storming is the next stage, when all Hell breaks loose and the leaders are lynched. Factions form, personalities clash, no-one concedes a single point without first fighting tooth and nail. Most importantly, very little communication occurs since no one is listening and some are still unwilling to talk openly. True, this battle ground may seem a little extreme for the groups to which you belong - but if you look beneath the veil of civility at the seething sarcasm, invective and innuendo, perhaps the picture come more into focus.

Then comes the Norming. At this stage the sub-groups begin to recognize the merits of working

together and the in-fighting subsides. Since a new spirit of co-operation is evident, every member begins to feel secure in expressing their own view points and these are discussed openly with the whole group. The most significant improvement is that people start to listen to each other. Work methods become established and recognized by the group as a whole.

And finally: Performing. This is the culmination, when the group has settled on a system which allows free and frank exchange of views and a high degree of support by the group for each other and its own decisions.

In terms of performance, the group starts at a level slightly below the sum of the individuals' levels and then drops abruptly to its nadir until it climbs during Norming to a new level of Performing which is (hopefully) well above the start. It is this elevated level of performance which is the main justification for using the group process rather than a simple group of staff.

Group Skills

The group process is a series of changes which occur as a group of individuals form into a cohesive and effective operating unit. If the process is understood, it can be accelerated.

There are two main sets of skills which a group must acquire:

- Managerial Skills
- Interpersonal Skills

and the acceleration of the group process is simply the accelerated acquisition of these.

As a self-managing unit, a group has to undertake most of the functions of a Group Leader collectively. For instance, meetings must be organized, budgets decided, strategic planning undertaken, goals set, performance monitored, reviews scheduled, etc. It is increasingly recognized that it is a fallacy to expect an individual to suddenly assume managerial responsibility without assistance; in the group it is even more so. Even if there are practiced managers in the group, they must first agree on a method, and then convince and train the remainder of the group.

As a collection of people, a group needs to relearn some basic manners and people-management skills. Again, think of that self-opinionated, cantankerous loud-mouth; he/she should learn good manners, and the group must learn to enforce these manners without destructive confrontation.

Accelerating Development

It is common practice in accelerating group development to appoint, and if necessary train, a "group facilitator". The role of this person is to continually draw the groups' attention to the group process and to suggest structures and practices to support and enhance the group skills. This must be only a short-term training strategy, however, since the existence of a single facilitator may prevent the group from assuming collective responsibility for the group process. The aim of any group should be that facilitation is performed by every member equally and constantly. If this responsibility is recognised and undertaken from the beginning by all, then the Storming phase may be avoided and the group development passed straight into Norming.

The following is a set of suggestions which may help in group formation. They are offered as

suggestions, no more; a group will work towards its own practices and norms.

Focus

The two basic foci should be the group and the task.

If something is to be decided, it is the group that decides it. If there is a problem, the group solves it. If a member is performing badly, it is the group who asks for change.

If individual conflicts arise, review them in terms of the task. If there is initially a lack of structure and purpose in the deliberations, impose both in terms of the task. If there are disputes between alternative courses of action, negotiate in terms of the task.

Clarification

In any project management, the clarity of the specification is of paramount importance - in group work it is exponentially so. Suppose that there is a 0.8 chance of an individual understanding the task correctly (which is very high). If there are 8 members in the group then the chance of the group all working towards that same task is 0.17. And the same reasoning hold for every decision and action taken throughout the life of the group.

It is the first responsibility of the group to clarify its own task, and to record this understanding so that it can be constantly seen. This *mission statement* may be revised or replaced, but it should always act as a focus for the groups deliberations and actions.

The mouse

In any group, there is always the quiet one in the corner who doesn't say much. That individual is the most under utilized resource in the whole group, and so represents the best return for minimal effort by the group as a whole. It is the responsibility of that individual to speak out and to contribute. It is the responsibility of the group to encourage and develop that person, to include him/her in the discussion and actions, and to provide positive reinforcement each time that happens.

The loud-mouth

In any group, there is always a dominant member whose opinions form a disproportionate share of the discussion. It is the responsibility of each individual to consider whether they are that person. It is the responsibility of the group to ask whether the loud-mouth might like to summarize briefly, and then ask for other views.

The written record

Often a decision which is not recorded will become clouded and have to be rediscused. This can be avoided simply by recording on a large display (where the group can clearly see) each decision as it is made. This has the further advantage that each decision must be expressed in a clear and concise form which ensures that it is clarified.

Feedback (negative)

All criticism must be neutral: focused on the task and not the personality. So rather than calling Johnie an innumerate moron, point out the error and offer him a calculator. It is wise to adopt the policy of giving feedback frequently, especially for small things - this can be couched as mutual coaching, and it reduces the destructive impact of criticism when things go badly wrong.

Every criticism must be accompanied by a positive suggestion for improvement.

Feedback (positive)

If anyone does something well, praise it. Not only does this reenforce commendable actions, but it also mollifies the negative feedback which may come later. Progress in the task should be emphasised.

Handling failure

The long term success of a group depends upon how it deals with failure. It is a very British tendency to brush off failure and to get on with the next stage with no more than a mention - it is a very foolish tendency. Any failure should be explored by the group. This is not to attribute blame (for that is shared by the whole group as an individual only acts with delegated responsibility), but rather to examine the causes and to devise a mechanism which either monitors against or prevents repetition. A mistake should only happen once if it is treated correctly.

One practise which is particularly useful is to delegate the agreed solution to the individual or sub-group who made the original error. This allows the group to demonstrate its continuing trust and the penitent to make amends.

Handling deadlock

If two opposing points of view are held in the group then some action must be taken. Several possibly strategies exist. Each sub-group could debate from the other sub-group's view-point in order to better understand it. Common ground could be emphasised, and the differences viewed for a possible middle or alternative strategy. Each could be debated in the light of the original task. But firstly the group should decide how much time the debate actually merits and then guillotine it after that time - then, if the issue is not critical, toss a coin.

Sign posting

As each small point is discussed, the larger picture can be obscured. Thus it is useful frequently to remind the group: this is where we came from, this is where we got to, this is where we should be going.

Avoid single solutions

First ideas are not always best. For any given problem, the group should generate alternatives, evaluate these in terms of the task, pick one and implement it. But most importantly, they must also monitor the outcome, schedule a review and be prepared to change the plan.

Active communication

Communication is the responsibility of both the speaker and the listener. The speaker must actively seek to express the ideas in a clear and concise manner - the listener must actively seek to understand what has been said and to ask for clarification if unsure. Finally, both parties must be sure that the ideas have been correctly communicated perhaps by the listener summarizing what was said in a different way.

Conclusion

Groups are like relationships - you have to work at them. In the work place, they constitute an important unit of activity but one whose support needs are only recently becoming understood. By making the group itself responsible for its own support, the responsibility becomes an accelerator for the group process. What is vital, is that these needs are recognized and explicitly dealt with by the group. Time and resources must be allocated to this by the group and by Management, and the group process must be planned, monitored and reviewed just like any other managed process.

<u>Gerard M Blair</u> is a Senior Lecturer in VLSI Design at the Department of Electrical Engineering, The University of Edinburgh. His book <u>Starting to Manage: the essential skills</u> is published by Chartwell-Bratt (UK) and the Institute of Electrical and Electronics Engineers (USA). He welcomes feedback either by email (gerard@ee.ed.ac.uk) or by any other method found <u>here</u>

Links to more of my articles on Management Skills can be found <u>here</u>