TEAMWORKING

some international perspectives

Edited by
Robert Park
Roger Harris
Emily Collins
Teamworking: some international perspectives

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Introduction

Bob Park

The central theme of this book is teamworking as an alternative form of work organisation. Its genesis arose from the Second International Conference on Teamworking held in Adelaide in September 1998. The idea for this second workshop came from attending the first in Nottingham (September 1997), organised by Stephen Procter (University of Nottingham) and Frank Mueller (Royal Hollway, University of London). The aim of these international workshops is to provide a forum for researchers with an interest in teamwork to share their findings and develop a deeper understanding of the contextual and conceptual issues with respect to teamworking. This book has been arranged into a beginning and concluding chapter, separated by four main sections: structures and processes; perspectives on leadership and membership; training; and alternative applications.

Before beginning an in-depth discussion and analysis, it is worth mentioning why so many organisations have or are contemplating introducing teams. In the current deregulated global economic climate, which is constantly changing and fiercely competitive, many organisations are searching for strategies that will enable them to survive and gain a competitive edge over rivals. To achieve these objectives, organisations have implemented strategies such as: mergers and acquisitions, corporate downsizing, reengineering, global sourcing of suppliers, introduction of new technology, reduction of production costs, right first-time capability, quality improvement, shorter design-to-market cycles and better utilisation of human resources. Improved utilisation of human resources, in terms of the way they are organised and managed (which some claim as the most important resource organisations have, and ultimately the only competitive advantage), is one reason why teamworking has become so popular. Cooke and Morgan support this claim, stating that organisations are embarking:

... upon a process of experimentation in areas of corporate governance; research and development; manufacturing operations; and supply chain development. In the production sphere the more innovative firms are trying to devolve responsibility to work teams who are supposedly empowered to use their local knowledge in the name of continuous improvement. (Cooke and Morgan, cited in Delbridge and Lowe, 1998: 225)

In The Machine That Changed the World, a book which has had a marked influence on the world automotive manufacturing industry, Womack et al (1991) state that work teams are a very important part of today’s manufacturing organisations. Research conducted by Patterson et al (1997) highlights the relationship between people management practices and organisational performance. They state that:

Human resource management practices (selection, induction, training and development, appraisals, skill flexibility, job responsibility, variety and the use of teams) explain nineteen per cent of the variation in profitability and eighteen per cent of differences in productivity between companies and, over time, within organisations. (Patterson et al, 1997: viii)
Having established, albeit somewhat briefly, why organisations are implementing teamworking, let us now refocus. The chapter "Teamworking: where are we now?" by Procter and Mueller is a fitting place to start. They begin the discussion by analysing some of the contextual and conceptual issues of teamworking, including business systems, industrial relations, training and development, industry characteristics, roles and responsibilities of team leaders and members, management style, and employee attitudes towards teamworking. Procter and Mueller maintain that the aforementioned issues need to be considered with respect to their organisation-wide implications, particularly in terms of their potential effects on culture and employees. In their analysis, these authors also question the effectiveness of teamworking and how it is understood and dealt with by employees, focusing on how staff conceive and make use of teamworking.

Part 1, 'Structures and processes', continues the discussion of issues raised by Procter and Mueller. In this section, Tucker and Kay, Marx and Shiobara, and Park illustrate how such conceptual and contextual issues have been dealt with by organisations from different industry sectors and world settings. They address a variety of issues, ranging from change management strategies, leadership, training, systems, vision, values, structures and reasons for choosing to implement teamworking. For example, Tucker and Kay and Park discuss instances of using pilot groups to implement teams. Marx and Shiobara provide some practical guidelines to implementing organisational change based on a specific type of team: the semi-autonomous group. In light of their case study, they emphasise the importance of coordination and design teams to the success of the change process and of considering how any proposed changes will affect the workers. In all three case examples, the organisations have used different planning strategies, methodologies, team terminology, styles and tools of analysis to determine the effectiveness of their respective programs.

Thompson focuses his chapter on the product development process in a number of automotive manufacturing organisations, and how they have approached the concept of teamworking. From a systems perspective, Faulkner analyses different industrial relations models used within Australia and how they have influenced relationships between management and the workforce. He concludes that successful introduction of teamworking is dependent on the existence of good employer-employee relationships at the level of the individual enterprise. Achievement of such relationships, however, is not related to the model of industrial relations in use at the time.

Part 2, 'Perspectives on leadership and membership', opens with Elsey and Fujiwara's empirical study of kaizen workers (team leaders responsible for continuous quality improvement in foreign transplants) in Toyota Motor Company. The roles of kaizen are analysed through self-perceptions of their work methods, the language and communication problems they encounter and other related issues. Williams reviews the management versus leadership debate and analyses the qualities required by leaders and their suitability for taking organisations into the next century. He suggests that, to be more profitable, leadership requires a holistic approach. He also concludes that an effective leader, particularly of a self-managing work team, must adopt a facilitator role, i.e. be a coach rather than an expert.

Gough and MacIntosh examine leadership issues from a team perspective, utilising a framework developed by Thompson and Marks (1997) which incorporates team
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governance. In particular, they focus on the range of decisions made about the 
authority of teams, their management, leadership and relationship with the larger 
organisation. They also report a selection of observations from fieldwork on several 
manufacturing plants regarding the effects of some senior management decisions on 
team performance. For instance, Thompson and Marks cite examples of operators 
and their team leaders facing confused prescriptions from management, continuing 
to work with equipment more appropriate to traditional, non team-based production 
arangements and receiving little support.

Part 3 is an exploration of the role played by training in the introduction of 
teamworking. Martin and Chaousis present their research on the value of training for 
self-managing teams. This work was undertaken to explore the concept of self-
management, question the value of training and analyse its variables, in order to 
identify those areas perceived as being of greatest value. In Chapter 11, Smith argues 
that implementing teamworking can have a significant impact on the organisation. 
According to recent research, success often depends on extensive training programs 
that involve employees at all levels in the enterprise. Smith concludes that such 
training should be sourced internally, implemented from the top down, and form 
part of a package of human resource practices and training for technical, 
interpersonal and behavioural skills.

Virgona, Waterhouse and Sefton analyse training from a different perspective - that 
of assessment and the notion of group competence. They state that the focus on 
teamworking in many modern workplaces raises a number of questions about 
competence, performance, assessment systems and the nature of work itself. They 
also argue that while it is individuals who are usually deemed competent or 
incompetent, in many workplace contexts, the performance of groups or teams of 
people is most significant. This implies a notion of collective competence; therefore, 
team-based approaches to assessing competence should be adopted.

Part 4, 'Alternative applications', is focused on the adoption of teamworking in a 
variety of different organisational contexts. It begins with Horton and Osborne 
exploring issues, concepts and context associated with particular forms of 
teamworking practices that have emerged in a Technical and Further Education 
Institute. Shanahan presents a very interesting case study of the South Australian 
Police. He details the role of the police negotiation team, emphasising the importance 
of maintaining team integrity to the successful resolution of high-risk incidents. In 
the next chapter, Hiley creatively uses the team concept with a group of university 
students. Her case study on 'InsideOut teams' challenges the reader to think quite 
differently about how the concept of teamworking can be applied. Hiley expands on 
the operation of InsideOut teams and how they might be relevant in business and/or 
avademic settings for high-quality learning and other achievements.

The concluding chapter revisits the issue of the implications for organisations of 
implementing teamworking, particularly in terms of its cultural effects. Delbridge 
considers some discrepancies in survey and case-study research of teamworking. 
Focusing on social relations through a discussion of the exercise of peer pressure 
among team members, he questions the effectiveness of teamworking and how it is 
understood and dealt with by employees. Delbridge concludes that under certain 
conditions of teamworking, workers remain aware of, and are active in taking 
choices about, how to interact and act. Workers may establish pockets of solidarity
that are effective in seeking support and establishing meaningful patterns of resistance, or at least mechanisms for surviving the working day.

Together, these chapters provide some international perspectives on the increasingly common phenomenon of teamworking. Over the last decade or so, teamworking has become an important issue in the learning and thinking of organisations and their management. However, teamworking is not a new phenomenon; part of the socio-technical tradition (Procter and Mueller, 2000), it was an important element of the quality of work-life movement of the 1970s in the United States of America. One integral aspect of this was an attempt to move away from direct management control to a more participative management style, to gain commitment from workers. The opening paragraphs of this introduction illustrate how management thinking is changing; teamworking is now seen as an important component of corporate strategic planning.

As Procter and Mueller (Chapter 1) remind us, teamworking is not simple or straightforward:

Its current manifestations need to be understood ... Its organisation-wide implications and its normative or cultural emphasis require understanding.

It is the aim of this book that, in reading the following chapters covering different manifestations of teamworking in various settings and countries, the reader will gain a greater understanding of related issues.

References


Introduction


Teamworking: the state of play
Teamworking: where are we now?

Stephen Procter
Business School, University of Nottingham

Frank Mueller
School of Management, University of London

Teamworking cannot be dismissed as a management fad. It is an idea with a long history and a strong rationale. At the same time, it arises at different times, for different reasons and in different forms. The current manifestation of teamworking therefore needs to be understood, particularly its organisation-wide implications and normative or cultural emphasis. We need to understand under what organisational conditions teamworking is likely to be effective. We especially need to understand how shopfloor employees conceive and make use of teamworking.

It is difficult to avoid the current wave of interest in teamworking. In some eyes, it represents the solution to all organisational ills, allowing improved performance to be combined with an enhanced quality of working life for employees. From another perspective, it represents a subtle but effective means of incorporating and exploiting those same employees - the latest in a long line of management fads and fashions.

We argue here that neither of these views offers an adequate description and explanation of teamworking. First of all, teamworking cannot be dismissed as a management fad. Even the most cursory account of its history reveals it as an idea with a long history and a strong rationale. At the same time, we need to identify what distinguishes teamworking in its present manifestation. Here we shall see that what is important is its essentially strategic emphasis, its association with the reorganisation of production, and its normative or cultural aspects.

However, this does not mean that from the management point of view it will be effective at all times and in all circumstances. We argue here that in order to more fully understand teamworking, more emphasis needs to be placed on two things. First, given the importance placed on its cultural and normative aspects, we need to investigate how teamworking is understood and dealt with by employees. Second, we need to look at the conditions that are likely to affect the nature and effectiveness of teamworking. Within the organisation, these are likely to include reward and appraisal systems, training and development, industrial relations and the system of production.

Teamworking: origins and diffusion

Origins of teamworking
Although interest in teams and teamworking appears to be of quite recent origin, it is in fact something with deep roots in European thinking on organisation and management. We concentrate here on developments that ultimately arise out of the socio-technical theories of the 1940s and 1950s. The work of the London-based Tavistock Institute is of key importance. In its most famous study, Trist and Bamforth (1951) focused on the 'social and psychological consequences' of new forms of work organisation in the
British coal-mining industry. With automation, a version of mass production was introduced: the 'longwall' method. This method had displaced the autonomous, multi-skilled groups that operated under the old 'hand-got' system. Later work (Trist et al, 1963) showed how a compromise 'composite shortwall' had been developed and defended by the miners themselves. This was based on composite, multi-skilled, self-selecting groups responsible on one shift for the whole of the coal-getting cycle.

Importantly, the concept of autonomous working groups can thus be shown to be a spontaneous, intuitive response to certain working conditions (Buchanan, 1997). In contrast to more recent management fads such as business process re-engineering, it was not something invented by consultants and imposed upon organisations. It emerged from more fundamental considerations about the way in which work should be organised; its value was therefore likely to be much more long lasting. In Buchanan's words, teamworking is subject to an 'eager and enduring embrace'.

**Diffusion of ideas on teamworking**

The nature of teamworking means that it emerges in different forms, in different places and at different times. Socio-technical ideas were picked up in several countries, most notably in Scandinavia (Benders and van Hootegem, 1997). The Norwegian Industrial Democracy movement was particularly strong in the 1960s. From there, the ideas spread to Sweden, where they were seen by the employers' federation as a solution to the problems associated with routine work. Different trajectories were followed in other parts of Europe. An expert-oriented form of socio-technical theory, 'Modern Sociotechnology' was devised in the Netherlands (Benders and van Hootegem, 1997). Although German industry never developed its own socio-technical approach, from the mid-1970s there was substantial official interest in the humanisation of work. A number of experiments were carried out, involving dividing up production lines into 'production islands' (Harvey and von Behr, 1994).

In the United States, the idea of teams was an important part of the Quality of Working Life (QWL) movement (Benders and van Hootegem, 1997; Buchanan, 1997). The aim of the movement was to improve conditions of work in order to meet the enhanced expectations associated with rising living standards, while at the same time meeting organisational needs for improved quality and productivity. Teamwork was discovered again in the 1980s in the United States (Buchanan 1997), when it formed part of a variety of ideas. For example, it was instrumental in the move from control to commitment (Walton, 1985), and some version of teamworking has played a part in the emerging rhetoric of Human Resource Management (HRM) (Beer et al, 1984).

In the United Kingdom, cellular manufacturing has been important in reintroducing autonomous work groups (AWGs) to the country in which they were first identified (Benders and van Hootegem, 1997). The two ideas have enjoyed what Buchanan (1997) calls an 'ambiguous romance'. Partly under the influence of ideas such as 'high performance work teams' (Applebaum and Batt, 1994), cellular manufacturing has expanded rapidly in the United Kingdom since the end of the 1980s. It is partly on the back of this expansion that interest in teamworking has taken off (Procter et al, 1995).
Teamworking today

Current interest in teamworking can thus only be understood against this historical background. We are clearly currently in the middle of an intense wave of interest in the idea and its application. But how can we explain this, and how does this current wave of interest differ from its predecessors?

Extent of teamworking

We can date this current wave of interest from the mid-to late-1980s. In the United Kingdom, figures compiled by the Industrial Society (1995) show 40% of personnel managers report that their organisation used some self-managed teams, although only 10% of cases were primarily self-managed. A more striking finding was that 30% of self-managed teams were less than a year old, and another 35% were no more than three years old. Similarly, a survey of 564 manufacturing companies undertaken by Waterson et al (1997) found team-based working used to some extent by 70% of respondents. Further, teamworking appears to be moving out of the traditional confines of the manufacturing sector (eg. Lloyd and Newell, 1997).

Motivations for introduction

But how can we explain this wave of interest in teamworking? And how does it differ from previous waves? To answer this question, we need to look at why organisations might consider introducing teamworking. The idea of teamworking as it diffused through Scandinavia in the 1960s and 1970s was based on the existence of certain conditions and pressures. With rising living standards and tight labour markets, firms were faced with the problems of absenteeism and high rates of labour turnover. The objective in introducing teamworking was to address these issues by improving the quality of working life. Conversely, quite apart from any concerns about their effectiveness, the idea of teamworking or AWGs lost popularity in the early 1980s, because in straightened economic circumstances, absenteeism and labour turnover were no longer issues (Buchanan, 1994). Rather than the reduction of absenteeism and labour turnover, the objectives of work design are now organisational flexibility and a product quality necessary to meet customer requirements.

In other words, the objectives are now strategic rather than operational. As Thompson and Wallace (1996) express: 'The dominant emphasis is now instrumental. Teams are an instrument of redesign, not ends in themselves'. For Mueller (1994), management objectives in introducing teamworking are moving from the social to the economic. This is borne out in a number of empirical studies. Bacon and Blyton's (1997) survey of workplace union representatives in the United Kingdom steel industry, for example, revealed that respondents considered management motives in introducing teamworking to be primarily economic.

Types of teams

We have not attempted a definition of teamworking so far. As Marchington (1997) has pointed out, a wide variety of activities and structures can be considered under its heading. Different types of teams have also been identified in empirical studies. Cutcher-Gershenfeld (1994) have identified three types of work-based system: lean production, which involves each stage of process being tightly linked to the next; socio-technical systems, with AWGs being the central feature; and off-line teams, where team activity is off-line rather than production being organised around teams.
It is thus easier in some ways to explain what teamworking is not, rather than attempt to define it. A major source of confusion here is that a conception of teamworking is associated with the success enjoyed by the Japanese industry in the past 30 or so years. A major concern, especially in Britain and the United States, has been to precisely identify the source of the Japanese competitive advantage. In quality circles of the late 1970s and early 1980s, the secret of Japanese success was attributed to what we would categorise as 'off-line' teams (Hill, 1991). More recently, the success of Japanese manufacturers has been put down to 'lean production' (Womack et al, 1990). Confusion arises, because it is also claimed that the idea of the team lies at the heart of mass production. Neither quality circles nor lean teams, however, will be our concern here.

We can see this more clearly if we take Benders and van Hootegem's (1997) distinction between socio-technical and Japanese teams. Drawing on Dore's (1973) classic study of a factory run on Japanese principles, the key characteristics of the Japanese model are identified as: the focal position of the foreman; the minute description and regulation of work; and the limitation of kaizen or suggestions for continual improvement of the imposed Standard Operating Procedures. In short, Japanese teams were much more hierarchical in nature than their socio-technical counterparts, a finding borne out in more recent research (Delbridge et al, 1997).

Thus, we must ignore off-line and lean teams, and instead concentrate our effort on those that directly or indirectly fall within the tradition of the socio-technical team. The degree of autonomy enjoyed by the team distinguishes it from a collection of workers who merely work in the same department.

Even within this definition, there is scope for a wide variety of team forms. Part of this stems from the different national environments within which teams operate. For example, Harvey and von Behr (1994) draw a distinction between American cell manufacturing - 'a low-tech solution based around human input' - and German 'production islands', which were 'premised on making better use of technology by skill, not hard work'. According to Mueller (1992), these national forces can be of a strength equal to that of organisational traditions.

In British studies, teamworking has often been examined in the context of the introduction of cellular manufacturing. Survey work shows that especially in the engineering industry, cellular manufacturing spread widely and rapidly in the late 1980s and early 1990s (Ingersoll Engineers, 1990, 1994). Although cellular manufacturing is introduced for reasons of operations management, more importantly, when machines are brought together, so too are the workers who operate them. Thus, group technology provides for both the creation of small, autonomous units of production and - through flexibility within the cell - jobs with a greater degree of worker involvement (Bennett, 1986).

**Roles and responsibilities**

**Employee roles**
As we have seen, even within the limits of autonomous working groups, a number of different models are possible. Harvey and von Behr (1994) found a distinct lack of rotation in American cells and German production islands. In the United States, this was the result of union contracts; in Germany, it was primarily earnings-driven on the part of the skilled workers. On the whole, we see teamworking associated, if not with
the development of multi-skilled individuals, then at least with an increase in their flexibility between roles. A distinction can be made between functional flexibility 'accompanied by an increase in training and upgrading' and functional flexibility 'to meet shortages and intensify work' (O'Reilly, 1992). The introduction of 'teamworking' can thus be a cover for a reduction in the size of the workforce. Rather than being developed and trained in a variety of roles, team members are effectively forced into them, often with inadequate preparation.

Relevant here is the importance of task and work interdependence; the degree to which parts of the work cycle depend upon one another. This was shown to be of extreme importance in Trist and Bamforth's (1951) classic study. As Sprigg et al (1997) have shown, task interdependence has traditionally been seen as important for team functioning. Their starting point was the work of Liden et al (1997), who showed that group control becomes more positively related to group performance as task interdependence increases. A negative relationship was shown to exist when task interdependence was low. For their own study, Sprigg and associates looked at work rather than task interdependence. Although they argue that task interdependence is to some extent determined by technology, some variation is possible on the basis of decisions made about layout. The expression 'work interdependence' is used to reflect this wider view. Sprigg et al (1997) found an association of greater work interdependence with higher employee effectiveness, a relationship only partly influenced by control. In areas of low interdependence, teamworking appears to be an inappropriate form of work design - this mismatch being reflected in the greater strains being experienced by employees in these conditions.

**Role of the team leader**

The role of the team leader is seen as one of the most important issues in the design and operation of team-based systems. At one level, the need for any such role might be questioned: if team members are to enjoy significant levels of responsibility, what role is there for the creation of this level of hierarchy? Though it is expressed in different ways, it is expected that the team leader will take on the role of facilitator or coach. In practice, this can be very difficult to achieve, in part because of the difficulties in finding people to fill the role of team leader. If operations are reorganised along team-based lines, the obvious people to fill the new roles are those who were previously working as supervisors. In some cases, however, these may be exactly the wrong people to take on the new position, schooled as they are in a very different tradition. However, it may be difficult to develop team leaders from members of the team, and bringing in team leaders from outside can cause resentment.

At the same time, an organisation may be half-hearted in its attempts to introduce teamworking, being unwilling to accept its full implications. This can create severe problems for those in the position of team leader or supervisor. In a study of teamworking in a United Kingdom-based bicycle manufacturer, Watson and Rosborough (1997) found that tensions are often present in this role. Although expected to behave in a way consistent with the ideas of teamworking - and encourage others to do likewise - they were also faced with demanding production and financial targets, which encouraged them to revert to a style based on command and control.

It is perhaps not surprising that empirical work has found this to be a significant area of concern for organisations embarking on team-based operations. For example, in their study of European automotive engine plants, Mueller and Purcell (1992) found there
had been much experimentation with the role of elected team spokesperson. Supervisors experienced the most difficulty, as they felt their authority was being challenged by the changes being undertaken. When Buchanan and Preston (1992) looked at the introduction of teamworking and cellular manufacturing in an engineering company, the company was still experiencing difficulties with the new way of working. The supervisory style was unchanged; low trust and high intervention still characterised the relationship with the shopfloor. In their study of the Australian automotive industry, Park and Harris (1997) also determined the role of the team leader as crucial in the success of teamworking. Research in Australia suggests that despite this, there have been no serious attempts to develop the role of ‘coach’.

Teamworking: the normative aspect

Management style
If we are to accept that teamworking in its current manifestation carries implications for the organisation as a whole, then it is not just those directly involved in teams whose roles will be changed. In particular, it will entail a change in management style. This change can be conceptualised in a number of ways. Perhaps the most fruitful is to see it in terms of the ‘trust relations’ between management and workforce. In Beyond Contract, Fox (1974) claimed that two ‘syndromes’ of defining features could be identified which characterised two contrasting work patterns: low-discretion and high-discretion.

Teamworking assumes all the characteristics of a high-discretion syndrome. Its introduction and operation therefore requires the operation of high-trust management. That its effective use is inconsistent with low-trust management has been shown in a study of the introduction of cellular working in two parts of a large British-based engineering concern (Procter et al, 1995). In the first of the two parts, Company A, an open and participative style was used in the implementation of cellular manufacture. This approach appeared to meet with success. Company B management adopted a closed and non-communicative style. They justified this on the grounds that the changes were essential and were in any case going to take place. Though the changes were welcomed by some members of the organisation, the overall effect of management taking this line was to induce indifference and - at worst - resistance.

Employee attitudes
Of course, changing management style cannot be considered in isolation from employee attitudes and perceptions. While such issues as employee satisfaction and well-being have long been an important aspect of research on teamworking, our discussion so far suggests that we need to go beyond this rather simplistic analysis. Teamworking often carries with it the assumption, for example, that employees will be eager to take on new areas of responsibility. However, there might be good reasons why employees do not want to do so. In Ezzamel and Willmott’s (1997) study of a clothing manufacturer, the introduction of teamworking was associated with a new payments system in which the bonus depended on team effort, rather than individual effort. Individuals were not simply able to make choices about the pace of their own work; they were also obliged to supervise each other in order that the team bonus could be obtained. The ‘flat rate’ element of the new system meant that it was still possible to put in a minimum level of effort, and employees were unwilling to take on managerial responsibilities in regard to those who they viewed as fellow workers.
McCabe and Knights (1997) have obtained equally penetrating insight in their examination of the operation of teamworking in a large United Kingdom-based automotive manufacturing company. They divided employees' experiences into three categories: the bewitched, who tended to follow the company line and portray teamworking in a positive manner; the bothered, who resented the intrusion of teamworking into what they considered their private lives and who were worried by colleagues who had been taken in; and the bewildered, who dismissed teamworking as something without substance or anything new. What management wanted from teamwork - a pride in work, in the product and the organisation - was often seen as something which employees felt they had always exhibited, but which management had not acknowledged. The new emphasis on teamwork was thus interpreted as something of an insult.

The idea of teamworking is indeed something which employees might show a greater understanding of than management. McKinlay and Taylor (1997) showed how employees could turn the rhetoric of teamworking employed by management against them. In their study of the relationship between permanent and temporary staff in a subsidiary of Motorola, the idea of teamworking was something management hoped to use to make the permanent staff take responsibility for the discipline and control of their temporary counterparts. However, permanent workers interpreted the idea in a much more collectivist manner, and took action to develop and strengthen the position of the temporary staff with whom they were working.

As our earlier consideration of the origins of the idea showed, the idea of teamworking is not totally within the control of management. A study by Marks et al (1997) of teamworking in the Scottish spirits industry points to the dangers in assuming that its successful introduction should be seen as involving the internalisation by employees of the company's normative demands. They found that employees were aware of company intentions and were able to separate out the positive and the negative aspects of teamworking. High levels of cultural cohesion could thus be seen to emerge internally from the team, rather than being externally imposed.

What we can conclude is that while teamworking might be seen as demanding new kinds of attitudes and behaviours on the part of employees, this is a far from simple matter. Teamworking assumes that employees are able to operate effectively in an autonomous manner. If this is accepted, it should also be accepted that employees are quite able to interpret and operate teamworking in a manner that runs contrary to management intentions. This is not simply a question of employees' interpreting teamworking as a subtle form of intensifying control; the recent studies suggest a much more nuanced and variegated picture.

Organising for teamworking

Even if the normative aspects of teamworking are capable of being managed successfully, this might not be enough. The idea that teamworking carries with it implications for the organisation as a whole means that attention must also be paid to an organisation's structures and systems. We will consider these under four headings: reward and appraisal, training and development, industrial relations and production systems.
Reward and appraisal

Individual, appraisal-based systems of performance-related pay have been increasingly popular, in both theory and practice. From the point of view of teamworking, there is a great danger of such systems working to undermine the principles and objectives of a team-based organisation. Also difficult to reconcile with the operation of teamworking are systems of payment based on piece rates. Although piece rates might be conceived as one way of giving employees some control over the pace of their work, this autonomy is rather limited. Harvey and von Behr (1994) found that in the non-automotive metal industry, individual piece rates in Germany and the United States had the effect of encouraging workers to stay on one machine to maximise earnings, thus hampering the move to flexibility. Similarly, Lloyd and Newell (1997) showed how the operation of teamworking was constrained amongst the sales force of a pharmaceutical company, because of the failure to align it with the systems of pay and promotion.

This might be the key test of management's commitment to the idea of teamworking, but the limited evidence suggests that organisations are reluctant to provide support in the form of a reformed payment system. Knapp et al (1996) found that firms introducing teamworking in the Australian automotive industry were certainly much quicker to introduce non-monetary forms of recognition than monetary ones. Mueller and Purcell (1992) found that new systems of work put pressure on payments systems. Skill attainment pay systems were considered necessary to reflect the wider changes, although the lowest rate of progress had been in this area.

Training and development

In the case of training and development, it is not simply a case of providing more (Buchanan, 1994). Given the emphasis on the organisation and the constant need to change, functional, task-based training needs to give way to more general concerns with personal development and competences. These in turn feed in to the individual's contribution to the organisation effort. The dangers of deficiencies in this area are shown in a number of studies. Lloyd and Newell (1997) see it as important in the failure of teamworking in their case study company. Harvey and von Behr (1994) likewise see it as an impediment in American and German manufacturing, arguing that it tasks, rather than skills, were added to the new production cells.

Industrial relations

Industrial relations is an often neglected area of an organisation's operations that can impact on the success of teamworking. Too often it is assumed that trade unions will simply attempt to resist any reform of work organisation. Also, the role of trade unions can often be ignored completely. The importance of industrial relations is shown in Bacon and Blyton's (1997) study of the United Kingdom steel industry. Their survey of workplace union representatives revealed that the presence of teamworking correlated strongly with the existence of cooperative industrial relations. They suggest that this relationship follows the nature of the change. Other, less basic, reforms of work organisation might be more easily introduced in situations in which management and unions are in conflict. However, for the fundamental restructuring implied by teamworking, a high degree of worker-management cooperation is required.
Production systems
We have already seen how production may have to be reorganised in order for teamworking to be effective. A closer examination of production systems suggests that some will be more fertile ground for teamworking than others. As we have also seen, flow-line production is increasingly being run on ‘lean’ principles, and in these circumstances, teamworking may be very difficult to operate. On the other hand, batch production, in which an organisation makes a range of products in ‘batches’ of various sizes, lends itself quite easily to teamworking. As we have seen, teamworking in the United States and the United Kingdom often accompanies the introduction of cellular manufacturing, in which a functional-based batch production system is reorganised along product lines. These considerations are backed up by the findings of Cutcher-Gershenfeld et al (1994). Amongst the batch-production companies, they found all three types of work system: lean teams, off-line teams and socio-technical teams. This suggests a degree of flexibility and choice in batch production that is not available elsewhere.

Conclusions
The long history and frequent recurrence of teamworking suggest that it is a robust concept. Nonetheless, we have argued here for its being treated with sensitivity. We need to understand why it arises in certain places at certain times; its different forms and what these imply for managers and employees; and the organisational conditions in which it is likely to flourish. Above all, perhaps we need to understand how all of these things are related to how employees conceptualise and make use of the concept of teamworking. From a management perspective, this is essential in deciding how and if teamworking is to be introduced and operated successfully. From the point of view of the employees, it raises questions about their role and status within organisations and in society at large.

References


Structures and processes
Teamworking: some international perspectives

‘It couldn’t possibly work’: a case study of implementing the team-based approach to management developed by Ricardo Semler

Basil Tucker
Mack Consulting Group

Alick Kay
School of Management, University of South Australia

The popularity of teams and their implementation has greatly increased over the last ten years, largely due to reported successes. However, the objective of establishing teams is sometimes an end in itself, whereas it should be a means to an end; and that end should be to create synergy resulting in higher productivity, greater quality and increased customer satisfaction at lower cost. There are no ‘correct’ ways to implement teams, but one method outlined in this paper incorporates the management approach used by Ricardo Semler, as described in his book *Maverick*. Semler’s management philosophy has been described as unconventional, unorthodox and impractical, yet its application in his company Semco is a major success story. This paper introduces Semler’s concepts, examines their application in a South Australian organisation and evaluates the results.

The application of teams as a means of increasing organisational efficiency is gaining increasing prominence throughout industry. For example, Bergmann and De Meuse (1996) highlight the introduction of the ‘team concept’ in the workplace as a major strategy used by leading United States corporations to gain competitive advantage in the 1990s.

The benefits listed are numerous. For example, Gladstein (1984), Feurer et al (1996), Hackman (1990), Leonard (1996), Manz and Sims (1993), Parnaby (1988) and Wellins et al (1996) cite such benefits as higher productivity, motivation and satisfaction, greater flexibility, innovation, stimulation of worker creativity and problem-solving, lower costs and quicker response times. However, despite some glowing reports, not all team applications are successful for many reasons, including organisational upheaval, problematic leadership style, difficulties with reward and recognition and expectations of quick success (Wellins et al, 1996).

Essentially, there is no one specific teamworking model (Hague, 1997), and little research has been carried out as to how teams should be implemented, how fast, or what barriers exist to implementation (Bergmann and De Meuse, 1996). The objective of establishing teams is sometimes confused. Some organisations in Australia wish to adopt a teamworking model, since it is still perceived as ‘trendy’ or because their competitors are using the concept without considering the repercussions, viability or time required. The formation of teams should be a means to an end, rather than an end in itself. The end should be to create a synergy (van der Vegt et al, 1998) which results in many of the benefits listed above. The management approach advocated by Brazilian industrialist Ricardo Semler, as described in his book *Maverick*, is perhaps...
an extreme example of the use of teamwork to create synergy, but one which is used in this case study.

Semler

Ricardo Semler’s book has sold over a million copies (Fierman, 1995). It describes how he took over his father’s organisation (Semco) at the age of 21, and over 15 years made dramatic changes to this company, which manufactured items such as pumps, dishwashers, mixers and even biscuits. Documentation of the changes has also appeared in a series of articles (Semler, 1989, 1994a, 1994b), and in Australia through a Lateline (1993) documentary and a series of seminars conducted in 1995. Essentially, all these outline what Semler describes as ‘the world’s most unusual workplace’.

The following is a list of some of the major concepts:

• there are no receptionists or secretaries
• there are no written manuals or procedures
• employees set their own working hours
• all workers have access to the company books
• shopfloor workers set their own productivity targets and production schedules
• over 150 of the managerial staff set their own salaries and bonuses
• the organisation chart comprises three concentric circles
• 25% of the managers in any year are involved in job rotation

In addition, there are a number of specific concepts/terms used at Semco (Semler, 1993):

• family silverware - when a job opening occurs or a new position is created, a Semco employee who meets 70% of the requirements is given preferential consideration over outsiders.
• headline memos - all memos are limited to a single page, with a newspaper-like headline at the top that gets to the point.
• hepatitis leave - this is Semco’s version of sabbaticals, where professionals can take a few weeks or even a few months every year or two away from the usual duties, to learn new skills, redesign their job or simply recharge.
• lost in space - each year several young people are chosen from entry-level applicants and are let loose with no job description, no boss, no responsibilities. They are free to roam as long as they work in at least 12 departments in their first 12 months. They can then negotiate a more permanent arrangement with any of those departments.
• risk salary - about a third of all Semco employees have the option of taking a risk pay-cut of up to 25% and then receiving a supplement that raises their compensation to 125%, if the Company has a good year. If Semco does poorly, they are stuck with 75% of their salary. This program rewards those willing to take a risk, and lets labour costs fluctuate with profits and losses.
• reverse evaluation - before anyone is hired or promoted to a leadership position, they must be interviewed, evaluated and approved by all the people who will work for them. Also, every six months Semco managers are evaluated by the people they supervise, who anonymously complete a multiple-choice questionnaire developed for this purpose. The grades are posted for all to see;
those who consistently get bad results (that is less than 80 out of 100) usually leave Semco.

- nucleus of technological innovation - Semco has a small group of employees, mainly engineers, who are free of any day-to-day production and managerial responsibilities and spend all their time inventing new products, refining old ones, devising market strategies and dreaming up new lines of business.
- working at home - Ricardo Semler tries to do it at least three mornings a week and encourages everyone else who can work at home to do so. He believes it enhances concentration and productivity, and gives people more flexibility.
- satellite programs - Semco helps workers set up their own companies, transforming them from employees to partners. It leases production machines to them at favourable rates and offers advice on matters such as pricing, quality and taxes. They are then free to sell to competitors as well.

The changes made at Semco have been incremental over a period of 15 years, and Semler stresses that his model is not one that other organisations can copy exactly or that can guarantee success (Semler, 1995).

However, the impact of the concepts at Semco has been rather remarkable, particularly since the successes that occurred from the mid-1980s, a period that coincided with a time of savage recession in Brazil. For example, growth has shown a six-fold increase, productivity almost seven-fold, and profits five-fold (Semler, 1993). In terms of labour turnover, periods of up to 14 months occur when not one worker leaves the company, and there are 2,000 job applications on file, with word of mouth generating up to 300 applications (Semler, 1995). As far as corporate credibility goes, in 1995 the company had visits from representatives of 20 companies a month, and there was a seven-month waiting list. Visitors included giants such as IBM, General Motors, Kodak, Yashica and the BBC (Semler, 1995).

Interestingly, even writers in the developing field of evolutionary psychology (eg. Nicholson, 1998) cite Semco as an example of a company incorporating evolutionary psychological principles, through Semler's attempts to find a 'natural' way of managing.

Theory X and Y
One way of looking at the changes implemented by Semler could be through applying McGregor's (1960) Theory X and Theory Y model.

For example, before Semler took over, the Theory X assumptions about employees would have been predominant in the company, i.e. that:

- most people dislike work and avoid it when they can
- most people must be coerced and threatened with punishment before they will work, people require close direction while working
- most people actually prefer to be directed, since they tend to avoid responsibility and exhibit little ambition, being only interested in security.

However, the current culture at Semco, which emphasises people as the greatest resource, would be more in line with Theory Y assumptions, that:
• work is a natural activity, like play or rest
• people are capable of self-direction and self-control if they are committed to objectives
• people generally become committed to organisational objectives if they are rewarded for doing so
• the intellectual, creative and productive capabilities of employees are only partially used in the workplace.

What then, has been written about the 'Semco experiment'? Most articles tend to review the book and provide further commentary, or to give brief examples of some applications of one or more of the elements associated with Semco. Pottinger (1994) says that such concepts of empowerment, teams, upward-appraisal and profit-sharing exist in the human resource strategies of many of the more traditional companies, but not to the same extent or degree as at Semco. Australian journalists (Lloyd, 1993; Main, 1993) sing Semler's praises. Cowan (1994a, 1994b) gives examples of Semler-like thinking by management for employee empowerment in New South Wales shipyards. Naik (1994) writes about Hewlett-Packard's self-managed teams, leading to fewer levels in the organisation. Fierman (1995) cites Container Industries in Denver, a company that has tried to align itself with Semler's model. In seven years, the company was flattened from six layers to three, a 10% profit-sharing pool was developed, and copies of all financial information were circulated. The company became profitable, and annual sales more than doubled. Lancourt and Savage (1995) cite Eastman Chemicals and Jacksonville Foods as companies that have been transformed using a Semler model, with control and power given to all employees.

Therefore, there are seemingly only a few examples so far published over the last five years, despite apparently strong interest, as indicated by articles and word of mouth from those who have read the book. This paper describes an Adelaide organisation that applied the Semler philosophy to one of its departments when developing a team.

The organisation
• Catering and food services department of a hospital with 400 employees

Objective
• To reduce costs and inefficiency, streamline operations and increase quality of services provided

Method
Co-author Basil Tucker was brought in as a consultant to decide on a strategy for the department. The approach used was to identify what processes were already present and to focus on the best ones. A teams approach was recommended, and the acting catering manager was made team leader. The seven-person group was taken to a team-run catering and food services department of a major hospital, so that they could observe the processes first-hand and ask questions. The department was given the freedom to run as an autonomous unit, with the proviso that quality must be maintained and the needs of the clients must be met. However, how this was achieved was up to the team. Initially, there was substantial training in group processes and how to set targets and schedules. Visits by the consultant occurred about every two months for the first year, and then as required in following years.
Teamworking: some international perspectives

Team members became multi-skilled and had freedom in coming and going when they pleased. Once the team had settled, Semler's management concepts were introduced. Whereas many change processes go through Lewin's (1951) three-stage process of unfreezing, changing and re-freezing, Semler-type change does not involve any re-freezing. Lancourt and Savage (1995) refer to businesses like these as 'dynamic and somewhat chaotic virtual businesses'.

In many organisations, attempts to encourage greater employee responsibility for decision-making and managing are met with suspicion and hostility. This emphasises the importance of adequately preparing employees for this transition, including consideration of:

- the need for a cultural shift in the organisation
- background of employee involvement
- new roles and responsibilities
- criteria for team selection
- alternatives for non-team players
- new procedures and processes
- new recognition and reward systems
- lots of open discussion

It is also necessary to:

- overcome resistance to change through participation (Coch and French, 1948).
- consider the structure. As Rigg (1992) states, to change the behaviour in an organisation, one needs to begin with the structure. (He lauds Semco as providing an excellent example of de-bureaucratisation, where the power of the individual and small group is achieved through flattening the organisation.)
- clearly define the terms of reference - a detailed brief was prepared about what the organisation wished to reach a conclusion about.
- dedicate resources - this included team members, external assistance and audio visual aids.
- focus on the issue at hand - it was necessary to answer the question and debate the need to change.
- do not underestimate industry and organisation-specific knowledge - sometimes it is easy to underestimate industry and organisational complexity; this can be extremely time-consuming.

To manage the process, there are three key areas of consideration:

- organisation - how should the initiative be organised? This covers project leadership and direction. It also identifies that there may be problems with fragmentation and fractional groups, and with getting too many people involved.
- behaviour - how should the initiative be managed? Group dynamics and management representatives should be considered. Emotional roller coasters and stages of 'grief' can be expected.
- mechanics - how should the work be conducted? It is important to break the task into manageable pieces, establishing a deadline and milestones, but also acknowledging the downside of a democratic approach.
At the conclusion of the project, the team had developed considerable skills, experience and confidence in planning, decision-making and managing. This should be regarded as an organisational asset, and a basis on which to capitalise. There are five strategies that are useful in consolidating upon the start made:

- commit to further training (as there is a transition period from employee to entrepreneur)
- identify what the team believe requires attention and what approach should be adopted
- provide time off in normal hours
- trust judgments and tolerate calculated risks
- provide suggestions and inform of market successes

In implementing Semco’s programs, organisations that have developed successful partnerships with their employees strongly ascribe to these principles:

- the people that do the job are the experts
- employees are willing and able to increase their current contribution
- employees require means to reach the ends
- there needs to be a reason to do it better
- trust employees to act like adults and tolerate their mistakes

Results
The following procedures were reviewed:

- purchasing
- warehousing
- quality assurance
- inventory control
- food production
- distribution

Achievements
- Major revision of purchasing practices, staffing and rostering of staff, food distribution, menu selection, food preparation and quality assurance practices
- significant productivity gains and increase of staff morale
- resultant savings of around $150, 000 per annum each year since 1993 (10% of catering operation budget of $1.44 million)
- 1993-1995 centralising of operations
- 1995-1997 further streamlining for greater cost efficiency
- 1997-1998 focus on new technology in heating and transportation of food

Problems
- government policy
- occasional corners cut with respect to nutrition
- ‘bull-at-a-gate’ personality of team leader
- colleagues jealous of freedom allowed the team
- highly bureaucratic organisational culture
Conclusions

The effectiveness of teams can be gauged using a range of criteria. For example, Hackman (1990) lists the following:

- the group achieves specific performance levels in terms of quality, quantity and timeliness
- the group experience increases its future ability to continue working as a group
- the group experience contributes to individual satisfaction

Using these criteria, the team was quite successful. If evaluating effectiveness in cost savings alone, the figures are quite impressive. An important issue for consideration, however, is that of the reward systems aligned to the new structure (Beckham, 1998). There are quite a few examples of higher pay linked to successful teams (Wellins et al., 1996). How was this team rewarded? Since there was no monetary reward, the motivators were chiefly intrinsic; the team members gained great satisfaction in having substantial flexibility within a highly bureaucratic environment, being able to incorporate a wider range of skills in their work, having autonomy in their decision-making and a say in their future directions. It falls very much into the Theory Y concept of motivation; the rewards were intrinsic, with the drive for the team being to try and find further creative ways of improving productivity and decrease costs further - particularly in the confines of a bureaucracy. Of course, the organisation is thrilled with the substantial cost-savings.

On the downside, there was jealousy from other employees who did not have the freedom that the team members had, occasionally not helping the team members when they could have. Also, the team members were not highly educated, and their lack of knowledge in fields such as nutrition led to some minor errors.

If team members exhibited some deficiency and staff were unable to help, further training was recommended. With the success of this team over a period of five years, the hospital has been trying to organise teams for other departments.

In addition, as in Semler’s position at Semco, there needs to be a particular type of leader amenable to these concepts. Morgan and Zohar (1996) identify this type of leader as a ‘questioner’, ‘challenger’ and ‘catalyst’. The CEO fits into this mould.

In terms of organisations where implementation has begun, the writers have noted that, not surprisingly, those with a high need for autonomy and achievement tend to be at the forefront of being interested in implementing change. As Morgan and Zohar (1996) emphasise, Semco is not a model with programs to be followed and imitated to guarantee success. Although the authors believe that the programs are likely to result in performance improvement if implemented appropriately, of much greater importance is the adoption of the philosophy of the freedom, trust, commitment, risk-taking and informality that inspires them (Lloyd, 1994). Semco is an invitation for organisations to reconsider themselves and the role of their employees.
As Semler (1993) articulates, the most difficult challenge is to build an organisation which employs people who look forward to coming to work in the morning.

References


Teamworking: some international perspectives


The design of semi-autonomous groups: main steps and a case study

Roberto Marx and Eliane Shiobara
Production Engineering Department, University of São Paulo

Semi-autonomous groups (SAGs) are being adopted by a growing number of firms in the world. It seems that SAGs are being considered a strategic organisational alternative to face stronger innovation and flexibility needs. Based on some recent developments on the design and implementation of SAGs, including the creation of coordination and design teams, we propose a set of steps and activities to be followed in an organisational change based on SAGs. The discussion includes a case study of an organisational change project and its implementation in a Brazilian firm.

SAGs are being considered and adopted by a growing number of firms in Europe, the United States of America and Brazil (Lawler et al., 1992; Marx, 1996; Zarifian, 1995). It does not mean that SAGs will diffuse continuously in the same pace as observed in the past five years, since this option seems more adequate to firms that face stronger innovation and flexibility needs.

Traditional socio-technical literature does not offer more than basic principles for the design and implementation process (Chemh, 1979; Davis and Taylor, 1972; Pasmore, 1988). From a practitioner's point of view, there is a clear need of a more prescriptive methodology and of detailed guidelines to deal with important practical questions. Following Mintzberg's argument (1993), we assume that there is no 'one best way' to design and implement organisational changes, but on the other hand, the 'one of a kind' approach is very time consuming and frequently ineffective.

Based on some recent developments on that subject (Marx, 1997; Salerno, 1998; Sitter et al, 1994; Zarifian, 1995), we propose a set of steps and activities to be followed in the direction of the introduction of SAGs. The main focus is not on the behavioural side of this kind of change (that strongly prevails in the literature), but on the production and organisational design and changing needs. As an example of application, one case study is then presented and discussed.

Methodological approach to the design and implementation process

The general rule here is one of the traditional socio-technical principles: compatibility. In Chemh's (1979) words: 'The process of design must be compatible with its objectives. If the objective of design is a system capable of self-modification, of adapting to change, and making the most use of the creative capacities of the individual, then a constructively participative organisation is needed'.

SAGs must be considered as an organisational change linked to the overall strategy of a firm. This is why decisions and basic objectives must first be grounded in top management members, in the form of a compromise between them. After having defined the direction of changes, top management must involve the rest of the
organisation in the process of detailing how to implement them. The creation of a coordination team, composed of directors and managers directly linked to the changing effort, is useful for monitoring and giving feedback to all participants in the design and implementation processes.

At this point it is important to create a design team, which will be responsible not only for deciding how changes will be implemented, but principally to create an environment adequate for obtaining involvement and commitment with successively more and more employees, including direct workers. This phase is characterised by continuous discussion and explication of different visions for the future, and the changes needed to better face and/or create it.

Listed below is a typical design team agenda with the main questions for discussion:

- manufacturing strategy revision and the role played by SAGs
- consideration of process management approach
- physical changes with respect to the production process, including parallelisation and segmentation principles proposed by Sitter et al (1994)
- pilot's definition and choice of SAG type ('closed' or 'open' according to Salerno's (1998) classification)
- definition of SAG performance indicators and the internal dynamics to better pursue such indicators
- definition of selection and training programs for group members
- extent of the autonomy of SAGs
- less hierarchical levels, new roles for management and supervision and new forms for communication lateral boundaries, especially those with quality, maintenance, sales/marketing and product development services
- new human resources compensation, evaluation and career trajectory principles

This agenda is time consuming, since it depends very much on discussion and commitment between different professionals and viewpoints over strategic and daily aspects. But this is exactly where this kind of organisational change differs from more traditional ones, and may also offer different results. It depends on people's beliefs and their desire for change.

Consultants in this change process may contribute by acting as real external agents to help the organisation select the right questions for discussion, and by finding commitment in each of the answers.

From the perspective of our own experience with external consultancy, the following principles (dos and don'ts) could be considered as the type of guidelines we stressed earlier as important for a SAG-based process of change:

1. Don't initiate changes if management has not developed a shared vision of the firm's problems and a basic trajectory of solution.

2. Coordination and design teams are important for managers to practice the model of organisation they intend to be implemented on the shopfloor.
3. SAGs are not the only way of organising employees in teams (Marx, 1996). Consider alternatives and their potentials and risks before choosing one. In addition to cost savings, more importantly, SAGs seem to offer other competitive gains such as a quicker market response, evaluated in terms of time and in innovation of product scope.

4. Interpersonal relations and changing attitudes are of utmost importance. Nevertheless, opting for SAGs does not mean only a cultural/behavioural change. It is crucial to redesign organisational structures and boundaries and information systems and flow, and to apply the principles of Sitter et al (1994) to production process and control. Coherence in managers’ attitudes to daily events and to decisions is more important to change the attitudes of employees than heavy training and simulation/behavioural exercises.

5. Performance indicators must be carefully designed. They must be effective and reasonable, and considered as a tool for autonomous management. It is also important for SAGs to discuss and change their indicators from time-to-time. A flexible firm must rely on flexible design structure and decision-taking dynamics. One important dimension of the autonomy of SAGs is their capacity to decide between different priorities in day-to-day situations: is quality more important than cost? Should delivery time overpass quality patterns?

6. In accordance with the needs of the new organisation, the compensation system for change stresses the importance allocated by management to the change process as a whole. This must be part of the commitment approach stressed above.

7. Reducing hierarchical levels is a common consequence of this kind of change, but this decision must be taken more carefully than is standard. Supervisors or middle management traditionally decide on three different subjects: hierarchy, technicality and coordination. The first and second subjects are easily mapped and decentralised, but coordination is more complex, and redesigning the way it will be performed in a SAG environment is not an easy task. Hence, new roles and tasks for the ‘old’ supervisors must be considered carefully.

8. Technical services (quality, maintenance, human resources management) must occupy more strategic roles, since most of the daily ones will be performed by SAGs. This direction opens different areas of responsibility and decision-making that are usually not well developed by traditional organisations. Examples of such areas include technical and economical feasibility studies for changing old equipment, development of new suppliers based on quality patterns, designing new compensation and career systems, etc.

9. A very important issue that characterises this kind of change is the fact that the ‘new’ organisation seems to focus much more on ‘events’ (in Philippe Zarifian’s (1995) denomination) than on tasks or workers’ individual performances. Thus, considering ‘events’ as opportunities for learning and changing professional competencies is of utmost importance for the kind of competitive gains this organisation pursues.
10. In the long run, SAGs entail a new approach to organisational design. As we have seen, they are not only focused on the shopfloor; management, staff and suppliers are also affected by this transformation. The main keywords are autonomy, matrix-based organisations, treatment of events and new communications patterns between employees, groups and departments.

Case study

The plant is part of a multinational group with interests in food, personal products and domestic and industrial cleaning products. Acquired from another multinational group in 1993, the interest in SAGs is part of the organisational changing trajectory implemented after its acquisition. The plant has approximately 1200 employees, of which 140 are from staff areas. It is located 80 kilometres from São Paulo (the Brazilian financial and industrial centre) in a medium-sized city. Six main product lines are manufactured, most of them leaders in their market niche.

Until 1993, the management style and approach could best be defined as extremely traditional. The following aspects may facilitate the comprehension of the plant situation:

- five hierarchical levels from the plant manager to the direct workers
- paternalistic and authoritarian relations between management and employees
- high shopfloor turnover rates
- conventional technologies

The change process began with a strong emphasis on SAGs. One of the main reasons was that SAGs were being implemented in almost all company sites at that time, with very impressive results. Therefore, one of the main sources of pressure in this direction had come from representatives of the company’s headquarters.

A coordination committee was formed, with representatives of other sites and the main directors of the plant. The ‘factory of the future’ was foreseen as a more competitive one based on lower costs, better quality and productivity. Implementation of SAGs was considered an approach able to raise involvement and empowerment from direct workers; key aspects to the competitiveness the company wanted to reinforce. No specific improvement targets were fixed from the beginning; as only a certain amount of direct costs were to be cut.

A new model of management began its development, with a design team composed of approximately 20 employees (managers, supervisors and staff). Monthly general meetings were held during the first 18 months, for the discussion of the main items of the change agenda. Sub-groups focused on some subjects, and commonly brought to these meetings findings and doubts of their previous discussions. Direct workers were incorporated in these sub-groups after the project’s first year.

Main decisions taken by the design team:
- To choose as the pilot area the whole (technological complex) part of the plant responsible for the complete production of the most profitable product line. As a consequence, 33 workers in each (three) turn(s) were considered for SAGs.
To establish the number and profile of the pilot participants. It was decided that 70% would remain in the pilot area, 20% would be chosen from other areas, and 10% were to be reallocated in other parts of the plant. No dismissals would be made because of the new organisation concept.

To define the performance indicators of this area, as well as their controlling dynamics. Although the nomenclature remained as earlier - when the indicators measured performance of the whole plant only - the content and way of measuring and controlling changed after the SAG was introduced.

To reduce hierarchical levels from five to three.

To define new roles for support areas (especially quality, maintenance and production planning and control), coordinators (the new denomination for the former supervisors) and their new relation with the shopfloor. The overall orientation was to transfer autonomy and decisions to the SAG.

To establish a representative group: five workers were elected in each turn as being responsible for the communication link between the SAG and other areas/hierarchical levels.

To define a timetable and an agenda for the main meetings held periodically by the SAG.

To develop the focus of ‘technical’ and behavioural training programs.

Main topics for the future design team agenda:

- To redefine the compensation system and the desired profile and responsibilities of the workers, in order to guide wage incrementation based on a competencies approach.
- To redesign the ‘technical’ part of the training program, in order to support the new compensation system.
- To plan for the expansion of the new organisation throughout the rest of the plant.

Results to date:

- With respect to cultural/behavioural achievements, there was a clear perception from managers and direct workers interviewed that initiative, commitment and information flows had been rapidly enhanced. As these changes began to occur, the number and strategic importance of improvements suggested by members of the SAG significantly increased.

Conclusions

On one hand, this case illustrates the extreme care taken by management in search of a new organisational design process based on the autonomy of direct workers as a competitive weapon. Informal evaluation has revealed a clear movement towards commitment to each worker’s future and the future of the plant itself. On the other hand, delay in taking important decisions regarding the near future of the new organisational model reveals its dependency on an interrelated set of decisions vital for the maintenance of plant performance and for continuous improvement.

Specifically, we have addressed issues related to the definition of the new compensation system and its training program - including workers access to it, the desired set of worker profiles and new forms of gains sharing. If management do not view these vital and probably risky decisions as the driving force of this kind of
changing process, the following unresolved questions may lead to frustration for workers and disbelief in the commitment of management:

- What is the part of the direct workers in benefits achieved by the firm?
- Is there a new professional career for direct workers in this plant? What is the difference regarding the content of the environment work of SAGs, in comparison to the ‘old’ work organisation?
- What would be the new role and organisational insertion of the ‘old’ supervisors?
- Are there any changes regarding the orientation of manufacturing strategies that have influenced the introduction of SAGs?

References


Observations of cross-functional teaming and learning in the product development process

John Thompson
School of Engineering, University of South Australia

The author has visited a number of manufacturing plants and their suppliers in the United States and United Kingdom to observe the trends in their product development processes. Whereas time to market appears to be the main driving force behind the changes taking place, senior management is now realising that change to heavyweight teaming is not just the provision of power to the project leader. They are discovering that organisations lack people with the skills and ability to direct and work across functions and to enact their own philosophies as ultimate decision-makers, due to their restrictive view of the total business process. Furthermore, in attempting to make the change, senior management is discovering that change will not take place unless they create the necessary structures and work practices, and invest in the professional growth of those they wish to work in new ways. This paper is not an academic review, but rather an overview of the observations made.

The product development process from concept to customer is not the single ability to merely design a product. It is a process that involves every activity of the organisation. The foundation for its success is the project management system and the organisational structure coordinating these activities. As a management system, it must be designed to create cross-functional coordination, an organisational structure and working practices that enhance teamwork. To achieve the business strategy of the organisation, the system must also be designed to integrate the philosophies of concurrent engineering, total quality, just-in-time management and the learning organisation.

A typical product development project has to manage, integrate and control a complex set of activities that cut across the business boundaries, from concept development to product planning, product/process engineering and ramp up for production. Even at the production phase, contact must be maintained to appraise and feedback the causes of any problems that might eventuate for those responsible for the original design of the product and the processes for its production. This can be achieved, but it does require an architectural change in the culture and the organisational structure of the product development process and the way it is managed.

Manufacturing and product development in the late 1990s

Intense global competition, fragmented and sophisticated markets, rapidly changing and advancing technologies and changing national and international regulations have been challenging manufacturing organisations to adapt to a new environment. These four forces have become increasingly strong and have combined to create a fiercely competitive marketplace. They have had profound effects on the product development process and have compelled manufacturing industry to change to
smaller volumes, greater variety and customised product, shorter product life cycles and shorter lead times in all of the activities from concept to customer. The result has been to change the very basis of competition from price, to time to market, while simultaneously providing for total customer satisfaction by maintaining high quality, flexibility, product differentiation and service. To maintain such satisfaction today, the product development process must produce world class goods and services rapidly and at continuing reduced cost and increased quality. The ability to achieve a rapid product development cycle and the supportive manufacturing system and logistics to speed the product to the customer has become a significant competitive advantage. Products that are first or early to market have a longer sales life, command a greater market share and are initially not price-sensitive. Yet, products that are late to market lose a significant share of their profit potential and have a shortened life cycle.

Today's demands on the manufacturing organisation requires a new learning culture and one that is constantly subject to change. As the customer demands change, products change, the competition changes and so will the competitive strategy. The ability to achieve this continuing change is integrated within the structure, processes and culture of the organisation. Thus, it is essential that management recognises this and design structures that focus on people as the competitive advantage. This will mean new ways of working and empowerment of employees to promote learning for the continuing introduction of new products and processes, the adoption and use of new technologies and a rapid response to customer demands. As learning continues and is transferred from one project to the next, real learning and innovation increases, as users of the knowledge perceive new ways and different applications of where that knowledge can be applied. This learning organisation then becomes faster acting, more responsive and more effective in all that it does, resulting in a long-lasting competitive advantage based on people.

The problems experienced by today's manufacturing organisation for the development of new products are many and complex. They are:

- complex product development processes
- increasing organisational complexity
- increasing number of functions and projects to manage
- shortened product life cycle and hence lower volumes
- lack of leverage of financial and engineering resources across projects
- pressure to significantly reduce development times and costs
- more product development cycles

However, there are many companies that excel in product development in terms of speed to market and the number of new products developed. Companies of the ilk of Hewlett-Packard had well over 50% of sales derived from products introduced during the past year, and more than 500 new product development projects going on at any one time. Likewise, 3M Australia introduces some 1500 to 2000 new products each year.

A study conducted by the United Kingdom's Department of Trade and Industry found that of the many companies that volunteered for assessment, the top 10% of these companies had 62% of their product portfolio developed over the past five
years. This compared with the average performance of 3%. Another important finding was that organisations with the competency for new product development performed much better in all other performances measured, as illustrated below. In successful companies, new product development times have been cut by 75% and assembly times cut by 50%, and there has been a significant reduction in the number of parts. This has brought about reduced manufacturing costs and delivery times, better relationships with customers and suppliers, and a higher level of trust and support from the workforce.

The question to be asked now is: how do these successful companies achieve the ability to rapidly develop and produce new products for market?

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<td>Ex-stock availability</td>
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Product development organisation

The common belief is that the most effective way to shorten and improve product development cycles is through the collaborative work of cross-functional product development teams. This has been proven, and by implementing such actions, many organisations have achieved significant reductions in time and costs and improvements in quality and customer satisfaction. These are not easy to achieve, particularly in an environment where people operate in a matrix structure and see the membership of the cross-functional team as being temporary. Furthermore, collaboration among people from different functions is initially uncertain, as they suffer from too little mutual understanding and insufficient experience to make judgement on the work being performed by others while the project is evolving. However, much of this can be overcome, and with experience and learning, in time an effective product development team will emerge. To achieve this is a senior management responsibility. Senior management has the responsibility to establish the context in which functional integration and the product development cycle is to take place, to determine the work structures of the organisation and develop the
culture that will support them. Only senior management can break up the functional complexity, and introduce new work procedures and the project organisation that best suits their company. It is a senior management responsibility to realise that research into new working practices and structures are just as important for the long-term business success of the company as research into new products and technology.

Performance in cross-functional activities greatly depends on the attitudes that are developed and the culture that emerges from the sharing of information between upstream and downstream groups. Upstream groups must be willing to share preliminary information with their downstream colleagues, rather than wait until they are sure of the final outcome. The downstream group must then be willing to take the risk of using this information. The culture must be one of mutual trust, common responsibility and the sharing of successes. Integration exposes the weaknesses and mistakes that can be made with the immediate release of information to others, and creates a level of risk that would not normally be present. Good communication and understanding are essential, and the early and continued release of preliminary information, with two-way dialogue and rich face-to-face contact, will greatly promote successful teaming. This form of communication allows rapid response to problems, and the team as a whole will measure its success on the success of the product development process, rather than individual or functional attainments.

Hewlett-Packard has developed what they term the ‘Return Map’ as a tool to measure time to market, costs, break-even and potential profit. The product development team rather than management use this not so much for what it says, but what it does. It provides a measure for activities and directs the team to focus on getting things done, rather than who is responsible. For example, the Return Map will record the research and development and product development time and costs, the manufacturing time and costs, and sales. The product launch date will be determined, and estimation of the break-even point from the sales will indicate the payback period for the investment made. These activities are plotted before the start of any project and used as a continuing measure as the project evolves. This will indicate the cost of delays and the effect these will have on break even and profit. If a new feature is proposed during development, the extra time required for development and manufacturing can be determined. With a new sales potential, the new break even, profits and timeliness can be projected, to enable a decision on whether a new feature is worthwhile.

The Return Map is a graphical tool that will aid integration of the different functions in the product development team. It provides focus on the product development cycle as a whole and breaks down old barriers. There are many other tools that will reinforce and improve the teamworking capability. Quality Function Deployment is such a tool. Using customer needs to drive the product development process from the original product concept, it cascades this through product and parts design, process design, production and quality planning, and even occupational health and safety. If used as team-based approaches, there are other tools that will aid the development of teamworking in a cross-functional environment, such as design for manufacture and assembly, failure modes and effects analysis, value analysis and reviews.
The skills required to work in cross-functional activities are very different to those in the traditional sequenced product development process. The team member needs to be much broader in knowledge and skills for cross-functional teaming, and have the ability to diagnose and solve problems. Again, senior management has an important role to play in the personal growth and development of the individual, for effective participation in a cross-functional role. If management intends an organisation to be world class and to use its people as a competitive advantage, it must provide education and varied experiences.

The options for senior management to bring about integration are many, and can include the emergence of functions, physical proximity, integration through information technology, computer-aided design/computer-aided manufacture and databases and prototype sharing. However, the method that has been proven to work the best is the heavyweight project team lead by a senior engineering manager who becomes the project champion, with total responsibility for the project from concept to customer. Many Japanese companies use this approach, particularly in the automotive and electronic industry. However, its use is only possible if top management has created the organisational structure that promotes this form of working. In the early 1990s, Toyota reorganised its product development into focused design centres using dedicated heavyweight product development teams, achieving a 30% saving on their product development costs.

**Product development team structure**

The team structure can vary from lightweight, such as that found in the matrix organisation, to that of a heavyweight and eventually autonomous product development team. The lightweight structure has a team leader with a number of liaison staff representing the functions of the organisation. The leadership is weak and team members see their responsibility as being with their functional head and not the project. As a product development organisation, it will require the continuous involvement of senior management for design reviews external to the team at numerous milestones of the program. Several world-class companies use this approach, whereby a management team controls the phases and the gates/reviews that the project must pass through. The heavyweight team is an improvement on this, with team members being responsible to the project leader rather than the functional head. The project leader is the product champion. There is much more focus on the product development process and customer needs, and better cross-functional coordination and communication. This results in a higher level of concurrent engineering and a better product development process. The heavyweight project leader is also better able to interact as an equal with the functional heads for resource support to aid the project. The term heavyweight is not only expressing the power of the project leader, but of the attitudes, culture and behaviour of the team members. However, this is not achieved without extensive professional growth through previous experience, education and the involvement of senior management in restructuring the organisation.

The final progression is to the autonomous team. Here the team members are formally assigned, dedicated and co-located to the project team. Many large organisations have moved in this direction and reformed their organisation along the lines of product groups, in order to provide a focus on customer needs and to have
total responsibility for the projects undertaken. The team becomes all-powerful in what it does and in some cases may generate unnecessary work in maintaining its autonomy for a particular project, whereas solutions or componentry may be available in other sectors of the organisation.

**Project management in manufacturing organisations**

Manufacturing is quite different to other types of organisations using project management. In the main, these organisations consider and use project management for a single project. In fact, it appears that this is also the focus of most research and textbooks on project management. Successful companies need to optimise not just one product at a time, but a portfolio of products and technologies. In order to achieve economies of scale and scope in product development as well as in manufacturing, there is now a need to reuse existing technologies and designs in multiple products to achieve leverage of financial and engineering resources, but not at the expense of quality and competitiveness. There is also the need to learn from each project and to be able to apply that knowledge to the projects that follow. Thus the management of such a system needs to promote learning and the transfer of knowledge and technology across project boundaries and generations of products.

The project management system that assigns too much authority to each project manager may concentrate too heavily on developing multiple new products through a relatively autonomous project-orientated organisation. This system tends to result in the development of many proprietary components for each project, and may require excessive financial and engineering resources. Therefore, manufacturers need a product development organisation managed by a system that better balances individual project performance with inter-project coordination. The project management system to achieve this requires the ability to manage cross-functional and inter-project integration at the same time, while promoting learning and sharing technology and components across the projects.

In large organisations, the organisational complexity and the increasing number of development projects to be managed by project and functional managers is increasing the cost of development and reducing communications. It also minimises the personal development of functional managers, as their span of control is also reduced. This increasing complexity in a multi-project environment has resulted in an organisation where:

- there are too many functional engineering divisions, with too narrow specialisation of engineers and managers
- there are too many projects for each head to manage the engineering details of each project as well as inter-project coordination
- it has become too difficult for the project manager to oversee all of the functions
- there is insufficient sharing of knowledge, technology and components across similar projects
- the organisation is not effective for multiple projects
- research and development cannot be well coordinated, as projects are seen individually

Thus, heavyweight project management has been found wanting. But at the other end of the scale, functional management has also been found wanting due to its
weakness for cross-functional integration. However, functional management is better at managing the resources for multiple projects. What is required is an approach that can concurrently achieve cross-functional and inter-project coordination.

The multiple product development organisation has now emerged within a number of organisations that are developing many products at the same time. The electronics and automotive industries are examples. Design centres have been established to focus on a range of products that share similar attributes. This grouping of development projects has greatly reduced the number of projects in each centre, to allow greater focus on similar projects and a greater sharing of technology and other resources. With a centre head responsible for the several autonomous development teams, communication and planning across the different projects for financial and technology leverage can take place, resulting in the use of common components and the sharing of knowledge.

At the same time, the functional heads that support each centre also have fewer projects to support and coordinate, thus there has been significant reduction in management complexity. This will promote better communication between project leaders and functional heads.

The use of the design centre approach has provided a clear sense of purpose, which is the essential ingredient for learning. The project teams are participating in a shared goal in a meaningful environment, where people are treated equally and work together in a team (team of teams) and become self-motivated to achieve their objectives. The ownership of the development project by the project leader may not end with its completion, and when the project is transferred to manufacturing, he/she may also be transferred with it, to manage the product through to the hands of the customer. In this way, problems that result from the development project still belong to the person responsible for its development.

A major advantage to be gained from this approach is the significant reduction in the number of prototypes required. This is due to the increased span of control of each function, thus enabling more engineers and designers to share the same prototype. This is the source of significant savings to cost and time. Other advantages arise from this increased span of control. A better view of the entire product is seen by engineers, due to their increased span of work now overcoming their previously narrow specialisation, and that also provides for better learning, knowledge transfer and personal development. This is indeed true for the functional heads, who now see a much bigger picture of the organisation and become better equipped for advancement within it. By organising the various product managers and the functional heads into a planning unit within each product centre, a very effective product portfolio planning approach can be used. This will ensure good communications throughout the organisation, good technology and component sharing, and allocation of resources to multiple concurrent product development projects.

In total, this modern form of project management for the product development-manufacturing organisation has been reorganised to:
• reduce the number of functional departments
• reduce the number of projects that each functional head has to plan and allocate resources for
• increase the power of the project manager
• reduce time and costs
• improve learning, and promote knowledge transfer and sharing of technology and resources across multiple projects
• create an effective plan for future markets

Conclusion

Successful companies have achieved an effective project management system to cater for multiple product development in their organisations. This system has been achieved by top management creating structures that allow for cooperation and information exchange, through the co-location and establishment of heavyweight or autonomous project teams. This has identified the use of the software technologies, not only as technology, but as tools to assist the integration of its users.

Functions have been broadened, to allow the team to have contact with suppliers and customers and to know about the financial implications of the decisions they make. This has reduced coordination time and enabled people to carry out more tasks than they used to, thus increasing their motivation. A negative effect was detected in that there appeared to be less engineering time, but this was more than compensated for by the right first-time results obtained through greater cooperation.
Working in teams: a study of the relative effectiveness of centralised, industry-level and enterprise-based industrial relations – do IR really influence ER?

Luke Faulkner
School of International Business, University of South Australia

Regardless of the industrial relations (IR) model in use at any particular time, the most effective way to increase organisational flexibility and productivity is through developing, implementing and maintaining sound employer-employee communication channels. Research indicates that enterprise bargaining has required employees and employers to communicate with each other and this has facilitated productivity improvement. To this extent, it has been the most successful industrial relations model used in Australia for facilitating improvements in productivity. However, the same research suggests that in those organisations that always fostered sound communications between management and employees, the advent of enterprise bargaining did not have any significant influence on productivity.

The move to teams can only be achieved with trust and cooperation between management and the workforce. Traditional antagonisms must cease if new methods of working are to be successfully developed and implemented. The influence of various industrial relations models on employer-employee cooperation has long been debated. Traditionally, Australian industrial relations had the reputation of fostering more disputation than it solved. The move from a highly centralised model of IR to an enterprise-focused one over recent years has been a reflection of the growing belief that enterprise bargaining encourages greater employer-employee cooperation, and as a consequence - flexibility and productivity. Proponents of decentralised IR argue that a centralised system does not encourage the parties to build and maintain sound relationships at the enterprise level simply because they do not have to settle disputes at this level. They argue that change designed to increase flexibility and productivity is difficult to introduce at the level of individual enterprises within a centralised IR system. Advocates of centralised IR, on the other hand, point to the fact that changes designed to increase flexibility and productivity have been introduced throughout the history of Australia - even prior to the introduction of enterprise bargaining in 1991. In other words, organisations wishing to introduce change have always been able to do so within Australia's centralised system. They argue that decentralisation of IR should not proceed until it can be proven that it encourages greater cooperation and consequently, productivity and efficiency, than does centralised IR.

The 1983-96 'Statement of Accord Between the Australian Labor Party and the Australian Council of Trade Unions Regarding Economic Policy' (the Accord) was not one monolithic industrial relations process. Rather, it was a trial of three quite separate industrial relations models. The Accord began with the re-introduction of a centralist model, where wages and many conditions were determined at a national level, moved to an industry-based model in 1987 and then to an enterprise-based model in 1991. Previous studies of the merits of different industrial relations systems
have tended to rely on international comparisons. As a consequence, they have had to contend with providing explanations as to the probable impact of a number of other non-industrial factors on the effectiveness of different industrial relations systems.

Traditionally, such studies have been undertaken by embarking on cross-national industrial relations comparative research. Country-specific cultural, historical, political, economic and other factors that may also impact on productivity are often neglected in such research, thereby negating its reliability and credibility.

A work in progress, this paper is an examination of the general influence of the Accord and each of its three distinct stages on employer-employee cooperation and flexibility and productivity within the automotive component products manufacturing industry (CPS).

**Justification for the research**

The CPS has been chosen as the focus industry for a study of the effectiveness of the Accord for a number of reasons. It is a significant industry. In 1988, the CPS employed 30,000 across Australia. Even in 1991, the recession year, there were 21,446 people employed within this particular area of the automotive industry. In the 1994-95 financial year, sales exceeded $4,194m. In the 1995-96 period, sales had increased to over $4,600m and employment had increased to more than 23,000 (Automotive Industry Authority, 1996). CPS commodities have also been exported in ever-increasing quantities to a widening customer base. In this sector of the industry, output per employee has grown by an average of 13% p.a. between 1987 and 1993. Quality of finished goods has also improved (based on the number of customer complaints received). Employees are now trained more comprehensively across a wider span of functions, and 1997 absenteeism/turnover was recorded as 7.5% p.a. (from a high of 35% in the early 1980s). These changes were due to something ... but what? This project represents an attempt to determine the degree to which the Accord and its various phases influenced these changes.

The CPS has undergone extensive internal and external-induced change. It is very sensitive to fluctuations in the state of the Australian and international economies, which may affect demand. Throughout its history in Australia and elsewhere, the industry has been, and continues to be, a major source of employment. It is highly susceptible to variations in raw material availability and price. The industry has also experienced continually increasing competition throughout the life of the Accord, from domestic and foreign sources.

The industry has also traditionally been volatile. It is composed of blue-collar and white-collar employees, has had a history of strong union presence and high membership and, like so many other industries within the manufacturing sector, has experienced significant job losses over the past twenty years.

The CPS is also an industry that has a diversity of occupational categories. There are clearly defined categories of:
• managers/administrators
• professionals
• para-professionals
• tradespersons (qualified/apprentices)
• clerks
• salespersons/personal service workers
• assembly and process workers
• others (i.e. maintenance/cleaning)

The CPS is also politically significant. The automotive industry was targeted for 'special treatment' by the Labor Government, in the form of the Passenger Motor Vehicle Manufacturing Plan (the Button plan). The implementation of this tariff reduction plan in 1985 meant that the protection given to vehicles produced in Australia was reduced from 57.5% to 15% by the year 2000. Debate is now underway as to the most appropriate tariff after the year 2000. Quota restrictions on imported cars were abolished in 1988, and in 1989, the local content scheme (of special significance to the CPS) was removed. In short, the Australian automotive industry, of which the CPS is a part, has been forced to become more internationally competitive in price and quality, or face the possibility of extinction.

The CPS is highly competitive and under ever-increasing pressure to cut costs by manufacturers. For example, like other assemblers, to keep its business suppliers, Toyota must absorb 50% of all increases in labour costs and reduce prices by 5% per year for three years. In other words, this industry is being pressured by external forces to become more flexible, efficient, productive and profitable.

The historical, political, economic and social significance of this industry and the changes that have occurred within it over the life of the Accord are therefore pronounced and worthy of investigation, to determine the extent to which the Accord itself has influenced those changes.

The Accord

On one hand, the Accord has been attributed with increasing organisational flexibility and productivity across Australian industry (Buchanan and Callus, 1993; Costa, 1990; Dabscheck, 1990; Fallick, 1990; Green, 1990; Lewis and Spiers, 1990; Rimmer and Zappala, 1988; etc.). However, others have criticised it for being of no benefit, indeed detrimental, to the Australian economy and the workforce (Blandy, 1985, 1988; Blandy and Brummitt, 1990; Curran, 1991; Drago et al, 1992; Moore, 1988, 1989b; Sloan, 1992; etc.).

Although the Accord was 'amended' and re-released on several occasions throughout its life, it managed to maintain the commitment of most unions to its very strict stipulations. Indeed, the only concerted union attempt to gain benefits outside the established provisions of the Accord was the airline pilots dispute in 1989. This lengthy and costly dispute saw the use of the military by the Government for the first time since the coal miners' dispute in 1949, the condemnation of the actions of the pilots' union by the Australian Council of Trade Unions (ACTU), and the total defeat of the Airline Pilots Federation.
The union movement originally embraced the Accord because it promised the maintenance of real wage/salary levels in the face of growing inflation and general economic downturn. The union movement accepted later versions of the Accord, because they too appeared to offer (potential) benefits to unions and their members that probably would not have been achieved by other than the most powerful unions.

Throughout its life, the Accord was consistent in its promise to increase productivity. The achievement of enhanced productivity would, it was promised, benefit individual organisations and those employed within them, the Australian economy and the union movement in general.

A brief history of the Accord

The original Accord (or Accord Mark I, as it came to be known) was introduced in 1983, and saw the Hawke Government provide support for wage indexation in return for the union movement pledging to make no extra claims for wage increases.

Following a severe economic crisis in 1985-86, which saw a dramatic fall in the exchange rate of the Australian dollar and an accompanying stimulus to inflation, the ACTU agreed to abandon its stance on full wage indexation. This resulted in Accord Mark II delivering a discounted wages outcome in 1985-86.

Following a lengthy National Wage Case, the Australian Industrial Relations Commission (AIRC) in 1987 promulgated a new set of wage determination guidelines that ended the indexation system. The new guidelines stipulated wage increases to be available in two tiers. The first tier provided a $10 wage increase for all workers covered by awards, with the possibility of another 1.5% increase in October of that year. The second tier, with an increase of up to a maximum of 4%, was conditional on improvements in work practices to achieve greater efficiency and productivity. The significance of the March 1987 decision was that it promoted a productivity bargaining element which was based on unions and employers agreeing to reduce organisational costs by reducing wastage, and increasing efficiencies through the removal of inefficient and restrictive work practices. The 4% increase was intended to be cost-neutral to employers.

While this version of the Accord was applicable on a national level, its focus was at the level of the individual award. The 1987 National Wage Case decision which heralded Accord Mark III represents the intermediary phase between a very centralised model, and the enterprise-based approach to industrial relations that was to follow. The 4% second tier saw a shift in the responsibility for industrial relations away from the centralised control of the AIRC into the hands of the parties. The AIRC still had a predominant place in the determination and control of employer-employee relations in 1987 - as it did in 1997 after the implementation of the Workplace Relations Act. The AIRC still had to ratify award changes agreed to by the parties as part of the 4% second tier, and it maintained the authority to resolve industrial disputes by arbitration. However, the decision to delegate at least some of its wage determination powers to the parties themselves represented a fundamental shift in the focus of the Accord.
The National Wage Case decision of August 1988 continued the process of reform. It introduced the Structural Efficiency Principle (SEP), whereby wage increases were granted only if unions and employers pursued and achieved 'restructuring and efficiency'. The decision provided for a 3% wage increase to be paid not earlier than six months after receiving the original 3%. These increases were conditional on unions making a commitment to conducting a formal review of all relevant awards, taking into consideration such issues as skill-related career paths, wage relativities, flexibility and any cases where award provisions discriminated against sections of the workforce. This decision, like its 1987 predecessor, reinforced the central role and reconfirmed the authority of the AIRC, while also implementing moves towards the establishment of agreements between employers and unions at the level of industry awards.

It may be argued that the SEP was merely a continuation of the 1987 Award Restructuring Principle.

In the National Wage Case decision of August 1989, the AIRC reviewed progress under the SEP. The AIRC made it clear that the second instalment of the SEP adjustment would only be available if the Commission was satisfied that the Principle had been properly implemented. The AIRC also re-affirmed that in restructuring their awards, unions and employers would be required to 'improve the efficiency of industry and provide workers with access to more varied, fulfilling and better paid jobs'. Here again there was no significant change in the focus or direction of the Accord - the AIRC still maintained its power, authority and control over industrial relations, while the parties to awards were increasingly encouraged to negotiate rather than arbitrate.

In the National Wage Case decision of October 1991, the concept of enterprise bargaining was introduced. This was regarded as being another major step in the direction towards a more decentralised approach to industrial relations in Australia. This was a significant step away from the original Accord, promising to maintain wages and conditions at their existing levels and increase both over time.

Three phases

The first stage of the Accord process began with its introduction in 1983. This centralised approach to industrial relations operated between 1983 and 1987. The focus of industrial relations over this period was centred at the national level. Most conditions of employment, including wages, were determined on a macro basis by the Australian Industrial Relations Commission and its state equivalents and were thereafter applied to all workers covered by awards.

The industry-level approach to IR was a feature of the Accord, which operated between the years 1987 and 1991 and may be regarded as the second stage of the Accord process. During this period, wages and conditions of employment were by and large determined on an award-by-award basis. This era may be regarded as something of a hybrid of the centralised and enterprise models. Wages and conditions of employment were centrally determined and negotiated at the level of the workplace.
Operating over the period 1991-96, the enterprise bargaining model required most conditions of employment and wages to be determined at the level of the individual enterprise. This period may be regarded as the third stage of the Accord process.

Each of the three phases of the Accord was in existence for a period of approximately four years prior to either being replaced by a successor, or in the case of enterprise bargaining, before the Labor Party was ousted from Federal office in March 1996. The Accord process, in particular its three discreet phases, can therefore be studied in neat, discernible stages and their relative effectiveness compared and contrasted.

**Industry involvement and research methodology**

Research was undertaken using a triangulated approach. This consisted of a detailed examination of relevant historical records held by the A IRC over the 1983-96 period and collection of data from a self-administered questionnaire. Interviews were also conducted with senior management and union representatives from throughout the industry, all of whom were heavily involved in the implementation of the provisions of the Accord in the workplace. This examination of A IRC records was undertaken to determine the timing of Accord-inspired changes to awards/agreements. The information was compared with changes to productivity, as reported in the survey questionnaire and through the interviewing process. It was then used to determine if there were any links between the introduction of changes to relevant awards/agreements and changes to productivity in the CPS firms being studied.

The survey questionnaire was developed, piloted in four ‘Top 100’ CPS firms, and then distributed to senior staff within all other ‘Top 100’ organisations across Australia that manufacturing automotive component products. The ‘Top 100’ is a listing prepared on a regular basis by the FAPM, which shows the 100 most successful CPS firms in Australia, defined as those with the highest annual turnover. The inclusion of the names of firms on this list is a mark of achievement.

Due to the fact that many of the ‘Top 100’ CPS firms had more than one discrete work site in operation, it was decided to incorporate all ‘Top 100’ separate work sites into the survey. The response rate for completed questionnaires was 69.12%, based on those who had responded by 31 December, 1996.

**Findings to date**

Analysis is currently being undertaken using qualitative and qualitative methods. While the information received is still in the process of being examined, the preliminary (descriptive) findings are interesting.

- Staff/employee functional flexibility is reported to have increased in 91.6% of organisations responding to the survey questionnaire.
- Working-time flexibility is reported to have increased in 74.7% of responding organisations.
• 86.7% of respondents stated that product innovation had increased within their organisations over the period under investigation. Only 7.2% said that it had not increased.

• 89.2% of respondents stated that organisational flexibility had increased within their organisations, while only 4.8% of respondents reported that it had not increased.

• 78.8% of respondents reported that procedural flexibility had increased within their organisations. Only 10.8% of respondents reported that it had not increased. 42.2% of respondents stated that greater union cooperation had been a driving factor in increased procedural flexibility, while 49.9% believed that this was not a significant factor in the increase. 62.6% of respondents stated that the fact that there were fewer unions and less demarcation problems was not a contributing factor to increased procedural flexibility.

• The impetus for increased organisational flexibility appears to be increased competition, with 82.4% of respondents reporting that increased competition was important in increasing organisational flexibility. 66.2% of respondents stated that increases in procedural flexibility could be attributed to Government reductions in tariffs. Of particular interest, 27.7% of respondents stated that the reduction of tariffs had no or minor influence on the decision of their organisation to increase procedural flexibility.

Whether it was the existence of the Accord or other factors that were responsible for these outcomes can never be finally proven, regardless of the statistical testing used. Economic and political factors, managerial practices, policies and/or personalities and other externalities of non-industrial relations may have also contributed to changes in flexibility and productivity. This endemic problem associated with research within the social sciences has been recognised.

Information pertaining to the level of management-employee communication and cooperation at various periods throughout the Accord process was also collected. The data suggests that, at the beginning of the 1980s, employer-employee cooperation was far from ideal in a large percentage of 'Top 100' firms studied. Whether formal or informal, communication channels were virtually non-existent and consultation between the parties seldom occurred. Communication between management and employees only occurred when necessary. Employee cooperation with management in the adoption of new procedures and practices was low, as was employer-employee relations in general. These responses provide some support for the view of Wooden et al (1989: 2), who have stated:

Numerous studies have compared Australian managers with their overseas counterparts, and have found that, in general, our managers are more paternalistic, more conservative, more resistant to change, and more autocratic. They are also lacking in boldness, initiative, ideas and techniques and are dependent on government and foreign capital.

For some years, Australia has been moving away from a central-determined industrial relations system to one that is primarily workplace-focused. Indeed, with
the introduction of the Workplace Relations Act in 1996, it may be justifiably argued that the focus has moved even further downwards to the level of individual employees. Preliminary findings of the thesis suggest, however, that the model of IR in use at any particular time is not related to productivity improvement. It is the relationship and communication between management and employees at the level of the workplace that fosters productivity improvement, rather than enterprise bargaining per se. Enterprise bargaining was successful to the extent that it encouraged (indeed forced) employers and employees to develop and maintain working relationships. However, those organisations that originally had good employer-employee relations did not benefit from having enterprise bargaining rather than a centralised IR model.

Thus, the Accord did contribute to enhanced productivity across the 'Top 100' CPS firms studied. It did this by progressively requiring employers, employees and unions to establish and maintain sound working relationships at the level of individual worksites. Enterprise-focused communication and negotiation channels were progressively established throughout the Accord era, and it was this fact that influenced increased productivity throughout the 'Top 100' CPS firms studied.

To the extent that the enterprise bargaining system introduced by the AIRC in 1991 better facilitated (indeed necessitated) the establishment of worksite-based communication and negotiation channels, it may be regarded as being the most appropriate industrial relations model for stimulating productivity. However, while the development and implementation of negotiation and consultation practices and procedures were certainly fostered by the Accord, they were not dependent on it. The establishment of sound enterprise-based relations to facilitate communication between management, employees and unions does not appear to be dependent on the industrial relations system in operation at the time. Those 'Top 100' CPS firms which had good relations between the parties, and which had established formalised communication channels, performed significantly better than those firms which did not - regardless of the industrial relations model in operation.

In short, if appropriate (formal or informal) communication and negotiation procedures are in operation at the level of individual enterprises, a centralised model of industrial relations is able to facilitate similar levels of productivity as industry-based or enterprise-focused models (as measured by both quantity and quality of production).

It would seem that Kochan and Lansbury (1995: 2) may have a point when they say that 'the more successful strategies are those that promote greater communication, trust and coordination among the firm's various stake holders'.

The Accord also appeared to contribute to increases in labour and organisational flexibility. However, an interesting finding is that flexibility and productivity do not seem to be causally related. Flexibility (in any of its forms) does not appear to be linked to productivity or quality - other than to the extent that the development and implementation of strategies designed to increase labour and organisational flexibility necessitate the existence of close relations between management, employees and unions. This finding supports the views of the 1996 Industry Commission report of the Automotive Industry, where it was recognised that there had been an increased emphasis on skills development and the implementation of
flexible work patterns in the CPS. In turn, this had encouraged the 'on-going development of positive and cooperative employer-employee relationships, which are essential to facilitate continuous improvement in industry performance' (Automotive Industry, Industry Commission, 1996: XXXIII).

Implications

Flexibility and productivity within the Australian automotive component parts manufacturing industry did indeed increase over the reporting period. There also appears to be a relationship between the ability to introduce change designed to improve productivity and good employer-employee relations at the level of individual worksites. However, sound employer-employee relations can be developed and maintained regardless of the IR model in operation at any time. While enterprise bargaining has encouraged parties to work together, the same relationship can be achieved in a centralised IR system, provided there is a willingness to do so.

It would appear that the successful introduction of team-based production methods is dependent on the existence of good employer-employee relations at the level of individual enterprises. The achievement of such relations, however, is not related to the model of IR in use at the time. The degree to which the Accord influenced this situation is still to be examined. A number of factors external to the industrial relations environment may have contributed to this situation. While the early findings show otherwise, the reduction of tariffs and consequential increase in foreign competition may have been more responsible for productivity growth than the existence of the Accord. On the other hand, further examination of the data may indicate that the existence of the Accord, and its application within this industry, may have actually lessened the negative impact of increased foreign competition caused by tariff reductions. Future research on this topic is warranted.

Acknowledgements

The Federation of Automotive Products Manufacturers (FAPM) and the Australian Centre for Automotive Management (ACAM) are stakeholders in this project. The assistance and support provided by both organisations is gratefully acknowledged.

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Searching for success: a case study of implementing a team-based production system in an Australian automotive manufacturer

Robert Park
Australian Centre for Automotive Management,
University of South Australia

The following case study is an analysis of the journey undertaken by an Australian automotive manufacturer in implementing a team-based production system. The contextual factors driving the need for change are identified, and the process of transition and teamworking practices adopted by the company are described. After researching existing team-based approaches in Australian and overseas companies, a teamworking ideology was planned and implemented. The enterprise review (planning tool) and a visual management (5 'S') program were identified as critical for the successful implementation of teams. The conclusion reinforces the view that managing change is a continuous process that is timeless, dynamic and fluid in nature. Internal, external, political and cultural issues must be sensitively managed, and companies must continually develop their capability to carry through changes implied by strategy into operational performance.

This paper shares the knowledge and experiences gained through implementing a team-based production system in an Australian automotive manufacturer (hereafter referred to as the company). It is hoped that the findings of this case study will contribute to the growing body of knowledge on teamwork and the change model adopted for implementation. This study was undertaken in response to an identified need for the Australian automotive industry to enhance its understanding of teamworking within an Australian context. It builds on previous research conducted within the Australian automotive industry by members of the Australian Centre for Automotive Management (i.e. roles and responsibilities of team leaders and team members, the uptake of teams and two case studies).

Conception of the need for change

Australia's ten billion-dollar automotive industry has been facing an uncertain future in the global marketplace of the late twentieth century (Park et al, 1996: 95). This uncertainty is due to changes in trade and tariff policies, the impact of new technologies, rising customer demands and priorities and a new global economy (Bryant et al, 1994: 1; Zenger et al, 1994: 3). It is also facing increased passenger vehicle imports.

In addition to this increase in international trade, in 1997 the free trade policies of the Australian Government reduced the tariff on imported passenger vehicles from 57.5% in 1985 to 22.5%. Australian passenger vehicle manufacturers are thus facing fierce competition from newly industrial countries, which are eroding their market share (Park et al, 1996: 95).
Whilst the Australian automotive industry is only a minor player on the global stage, it is a major contributor to Australia’s manufacturing output (Kochan et al., 1997: 205). With their leading 150 component producers, Australia’s four automotive assemblers employ approximately 43,000 people. Employment in many other component producers and materials suppliers is also dependent on this industry. The value of the car industry to Australia in the mid-1990s was more than $7 billion (Business Victoria, 1996: 1). The consequences of the aforementioned influences are that the Australian automotive industry faces intensive global competition. Gosling (1999) cites three factors at the core of the world’s automotive industry globalisation strategies. First is the emergence of the ‘stateless corporation’, where there were:

US $1.2 billion of mergers and acquisitions in this industry in 1998. This followed a staggering 750 mergers in the USA alone in 1997, for a total US $28 billion. (Gosling, 1999: 2)

At present, the industry is witnessing the concentration of the 25 major original automotive assemblers into a smaller number of mega businesses. Alex Trotman (cited in Gosling, 1999: 2), formerly Chief Executive Officer of Ford Motor Company, recently predicted that within ten years there would be only six world class automotive assemblers. Industry analysts are also predicting that the 2,500 tier one suppliers in the world will be reduced to between 150 and 100 ‘systems integrators’ by the year 2005. In the last couple of years, the industry has witnessed the mergers/partnering of BMW/Rover, Daimler/Chrysler, Ford/Mazda and Renault/Nissan. General Motors has also strengthened its position with Isuzu, Toyota has increased its equity in Daihatsu, and Kia and Samsung have been incorporated into other Korean automotive assemblers.

Second, we are seeing the emergence of the post-industrial state (Gosling, 1999). Many countries view information technology, intellectual property, tourism and services as growth industries. Manufacturing, particularly small scale manufacturing, is no longer regarded as core business.

Major investors such as financial intuitions and insurance companies, particularly in western countries, do not except the diminishing returns from manufacturing. (Gosling, 1999: 2)

The third cited factor is the existence of national differences in ownership structures. For example:

Westerners run Mazda, the French sit at Nissan’s board table. The major challenge for BMW and Daimler is to incorporate British and American managers and management styles into the new joint ventures. (Gosling, 1999: 2)

Rationalisation, the shifting balance of power, excess capacity and a relentless drive to reduce costs all apply maximum pressure on the industry to respond with positive strategies and actions designed to meet or exceed the demands of shareholders and customers. The relentless crusade to reduce costs is driving automotive assemblers to reduce the high cost of design and engineering for new platforms. If new platforms can be developed for large-scale production in the widest possible markets, then the per-unit cost is substantially reduced (Gosling, 1999). Related to this continual
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crusade of cost reduction is the relentless focus on what the automotive assemblers regard as core business. The outsourcing of non-core activities to suppliers is increasing.

In some cases, 70% of the non-core activity is already outsourced compared to less than 50 per cent just five years ago. Chrysler is at 70 per cent; General Motors is at about 50 per cent. (Gosling, 1999: 3)

If the Australian automotive industry is to survive in this climate of intense global competition, it must develop and implement strategies that will enable it to survive and hopefully prosper. It must move away from traditional mass production principles and adopt world class manufacturing and management practices. It is the view of numerous authors that for manufacturers to remain competitive in a rapidly changing and highly competitive global market, they must deliver high quality products, be cost competitive and substantially decrease new product cycle times. However, the reality is that manufacturers must improve customer satisfaction and cycle times and reduce costs at the same time (Zenger et al, 1993).

Many automotive manufacturers are still operating under traditional scientific management practices (Womack et al, 1991: 99). They have focused most of their improvement efforts on technology and manufacturability. Technology and manufacturability are both important to high performance, but to gain the full potential of either requires superior plant management practices (Womack et al, 1991: 98). Initiatives that give companies a competitive advantage undergo change over time. As all other sources of competitive success become less important, the deciding factors will be the organisation, its employees and how they are organised (Pfeffer, 1994: 14). There are also suggestions that the most important and perhaps the ultimate advantage of Japanese automotive manufacturers is their ability to organise and manage work through lean manufacturing principles (Womack et al, 1991: 98).

Recent international research involving some 62 automotive assembly plants has reinforced the advantages of lean production over mass production. In comparison to traditional mass production plants, MacDuffie (1995) found that flexible (lean) production plants that utilised team-based forms of work organisation and had high commitment to human resource practices (e.g. skill development, job rotation, problem-solving responsibility and performance-based pay) had higher levels of productivity and quality.

However, technology acquisition knows no boundaries in today’s global marketplace, and production processes can be duplicated. Perhaps the only real lasting competitive advantage of the future lies in the management and organisation of human resources. More than ever before, the integration of technology, processes and people is now critically important for success. This integration was highlighted in a recent manufacturing competitiveness study conducted worldwide, commissioned by Andersen Consulting (Oliver et al, 1994: 2). This report stated that world-class performers in automotive component manufacturing were able to: maintain tight discipline and control over internal lean manufacturing processes (including extending this discipline to their whole supply chain), select and use technology appropriately and select appropriate management practices. Focusing on
management practices, Patterson et al (1997) cite evidence that many organisations fail to recognise the link between good people management practices and business success. The research of Patterson et al (1997) shows that the management of people has a greater effect on business performance than strategy, quality, manufacturing technology and research and development put together.

With respect to job satisfaction and organisational commitment, Patterson et al (1997) indicate that such factors explain up to 5% of the difference between the profitability of companies. It also suggests that when it comes to productivity, the results explain 16% of the variations, while organisational employee commitment explains about 7% (Patterson et al, 1997: 6-8). These results highlight the relationship between employee attitudes and company performance. They also indicate that the more satisfied workers are, the better the company is likely to perform with respect to profitability, particularly productivity. The most important finding of this research is the link between 'good' human resource management practices and profitability and productivity. The report suggested that, overall:

HRM practices (selection, induction, training and development, appraisals, skill flexibility, job responsibility, variety and the use of teams) explain nineteen per cent of the variation in profitability and eighteen per cent of differences in productivity between companies and, over time, within organisations.
(Patterson, 1997: viii)

These aforementioned practices are an integral part of the lean manufacturing concept. According to Womack (1991: 99), one of the two key features of a truly flexible, lean plant is the transferring of the maximum number of tasks and responsibilities to the workers who actually add value to the car on the line: 'it is the dynamic work team that emerges as the heart of the lean factory'.

**Transition to teamwork - what to change**

Making the transition to an organisational configuration based on the aforementioned practices encompassing teams involves a significant technical and social process (Mohrman et al, 1995: 27). The technical issues involve the design of structures, processes and systems. The social issues involve helping the people in the organisation understand how the team-based system operates and their new roles in it. In planning this transitional phase, organisations need to consider the 'system' theory perspective, i.e. alignment of supporting structures, production systems and capabilities, leadership, staff, shared values and training requirements (Galbraith, 1994; Peters and Waterman, 1982). This necessitates changing the roles and responsibilities of managers, supervisors, team leaders and team members, and possibly job redesign. It also requires devolving responsibilities and accountability for first-time capability, in-process quality improvements and cost reductions down to the level of where the tasks are actually performed.

To achieve this, team members must know and clearly understand the organisation's vision, strategies, goals and objectives, and align their goals according to them. Effective communication processes are required, and teams should be given certain decision-making responsibilities and skills so that they can efficiently perform their tasks. Leadership/management styles and skills may also need addressing. Without
appropriate leadership, teams can easily lose sight of the company's goals and objectives and their interdependence with other teams. They can also become embroiled in interpersonal conflict and therefore fall short of their enormous potential (Orsburn et al., 1990: 14). Managers and team leaders alike need to adopt a more collaborative, participative approach; one that involves coaching and mentoring, developing trust and commitment with their teams.

**Managing the change process**

Identifying the change strategy necessary for competitive success or survival is only part of the story; the ability of an organisation to successfully link strategic and operational change (i.e. to make it happen on the shopfloor) is also critical for success. A key intangible asset organisations must possess is the capability to carry through the changes implied by the strategy, and if necessary, transform the strategy through use (Whipp and Pettigrew, 1990: 2). Understanding and effective management of the change process is a necessary skill requirement for all managers, if they are to effectively implement the strategy into their area(s) of responsibility.

During the last decade or so, many Australia-based organisations have adopted a strategic approach to managing change. Early exponents of the strategic approach for managing and implementing change within organisations advocated a universalistic approach. While each claimed that theirs was the path to be followed, evidence now suggests that there is no 'one universalistic model' that is applicable for all organisations and all situations (Dawson, 1994; Dunphy and Griffiths, 1998). In light of this debate, a number of researchers began to focus on a more open-ended approach to strategic change management. This open-ended approach also took into account the political process involved and the issue of corporate cultural change. The contingency approach to strategy development grew out of this thinking (Dunphy and Griffiths, 1998).

An advocate for the 'strategic implementation process and particularly to the political process involved' (Dunphy and Griffiths, 1998: 113), Dawson (1994) suggested that the contingency approach should focus more specifically on the political and implementation processes, stating that:

> ... they do not tackle the political dimensions of change and secondly, no attempt is made to provide a typology of change strategies and conditions for their use during the actual process of organisational change. (Dawson, 1994: 23)

Dawson (1994: 41) developed a processual approach for explaining the change process. This approach involves the development of a framework for analysing and understanding the process of operational change as it unfolds within an organisation. This framework enables identification of the interconnectedness and complexity of the change process. Such interconnectedness can be achieved through combining three general timeframes with a three-fold classification of determinant factors that shape the process of organisational transformation. The three timeframes are: conception for the need for change, the process of organisational transition and operation of new work practices and procedures. The three classifications of determinant factors include the substance or content of the change program, the process of change and the context of change.
Other researchers such as Whipp and Pettigrew (1991) have adopted a 'contextualist' contingency approach to investigate the process of organisational change, stating that it is important to examine the context in which the chosen strategy occurs, its content and the process of change. Using this approach, they analysed two contextual levels in which strategic change occurs. The first level of change is associated with the inner context of the organisational culture, its structure, resources and politics. The second level is associated with external contextual issues such as those linked to the business/economic, political and social factors that impinge on the strategy.

Dunphy and Stace (1991), who also advocate a contingency approach, have argued: 'the right approach to strategic change will vary according to the nature of the situation' (Dunphy and Griffiths, 1998: 114). Dunphy and Stace (1994) have developed a contingency model for strategic change based on research conducted within Australian organisations. This model identifies two key factors as critical areas of choice for managers intending to plan and implement a strategic change program: the scale of change needed to effectively reposition the organisation strategically and the style of the leadership needed to effect the change. They also define four categories of corporate change approaches and suggest when to choose each of the four categories, based on the outcomes of their research. According to Dunphy and Stace (1994), one of the categories, i.e. developmental transition, is best suited for the introduction of teams. The style of change leadership associated with this corporate change strategy is directive/consultative.

Research conducted by the Australian Centre for Industrial Relations Research and Training (1999) indicates that senior management has driven many of the change programs implemented within Australian organisations: 'Management has largely acted unilaterally in terms of introducing change' (ACIRRT: 54).

These findings concur with those of Dunphy and Stace (1994). The steering committee established to plan and implement teamwork, unilaterally agreed to adopt a directive/consultative leadership style.

**Methodology**

As stated earlier, the conceptualisation of this project evolved from discussions with industry and union representatives. Discussions focused on key issues facing the industry, particularly new forms of work organisation (e.g. work groups/teams). A reference group was established, comprised of representatives from industry (automotive assemblers and component parts suppliers), government, union(s), training and tertiary providers and the Federation of Automotive Products Manufacturers (South Australia).

The role of the reference group was to determine the necessity and viability of this project. Once viability was determined, the committee advised the researchers on its format and target audience. The target companies included the four automotive assemblers and their component parts suppliers. Funding was secured from the Federal Department of Industry, Science and Tourism. A project group was established to assist in advertising the project and for selecting the company, once applications were received. The selected company was notified, and upon formal
acceptance, a company project manager was appointed. A memorandum of agreement was developed and signed by a senior manager, the leader of the union and the director of the research centre conducting the study.

The research centre's project manager then established contact with the company's project coordinator. The role of the centre's project manager was defined and agreed upon as that of a resource, to provide information and advice gained from national and international visits and research (re. team-based production systems - TBPS) and assist the company project coordinator as required. This project coordinator would take ownership and responsibility and drive the change. This was deemed appropriate because the coordinator knew his/her company's organisational culture and methods of operation. It was agreed that this was the best way to achieve the desired outcomes.

As stated earlier, the company established a steering committee involving senior management, union(s), the project coordinator and the research project manager. Two additional committees (advisory and implementation) were then established to ensure further consultation. Agreement was also obtained on the specifics of the change strategy, including the substance, context, politics, process and timeframes. Other tools that could assist the process were identified: training needs analysis, training programs, numeracy and literacy training, the enterprise review program (annual management planning process), the organisational climate, job diagnostic survey and a launch tool (the 5 'S' program). The process for organisational transformation was agreed as follows:

**Investigation phase**
- study history of companies, including enterprise agreements
- review literature, visit industry and seek presentations from international and local experts

**Planning phase**
- develop proposal, including style of teams, structure, timeframe and shared vision
- consult
- discuss proposal with all stakeholders (e.g. unions and senior management, all consultative groups)
- seek endorsement of proposal by unions, management and consultative groups to pilot teams

**Implementation phase**
- select pilot area
- train team leaders
- conduct information sessions re. needs, plans, etc.
- conduct job diagnostic survey and organisational climate survey
- record productivity information prior to commencement
- involve group(s) to identify team responsibilities, team rules and key performance indicators
- develop recording charts
- conduct visual management (5 'S') training program
Evaluation phase
- evaluate pilots after an appropriate time
- record productivity information and compare with data collected prior to commencement
- conduct organisational climate survey and compare data with original survey
- seek endorsement to establish work groups throughout company, if pilot program is successful

Process

(1) Investigation phase

The steps undertaken in the investigation phase developed by the steering committee were:

- collect data regarding TBPS by literature review, visits (local, interstate and international) and discussions with selected experts
- finalise draft TBPS proposal
- seek input on draft TBPS proposal from stakeholders
- select an area/process and appoint an implementation group (if decide to pilot program)
- complete proposal
- obtain proposal endorsement by steering committee, managing director and all stakeholders

Analysis of the company’s structural efficiency and enterprise agreements proved to be interesting. Previous agreements had involved piloting a different form of work organisation (teamworking), but for reasons not specified, both the company and the union had not pursued the matter. The project coordinator had also visited several companies in the United States of America to study teamwork.

The investigation phase highlighted that significant technical and social issues arise in the transition to an organisational configuration based on the logic of teams. Technical issues include the design of structures, processes and systems. The social issues involve helping people in the organisation to understand how the team-based system operates and their new roles in it. In planning this transitional phase, leaders in the organisations need to consider a systems approach, i.e. alignment of supporting structures, production systems and capabilities, leadership, staff, shared values and training requirements. This requires identifying the incumbent organisational culture, identifying a desirable team-based culture, defining the changing roles and responsibilities of senior and middle-level managers, supervisors, team leaders and team members, and possibly job redesign.

Identifying the change strategy necessary for competitive success or survival is only part of the story; the ability of an organisation to successfully link strategic and operational change is also critical for success (i.e. to make it happen on the shopfloor). A key intangible asset organisations must possess is the capability to carry through the changes implied by the strategy, and if necessary, transform the strategy through use.
Review of the literature unearthed an enormous amount of information and case studies on teamworking. Many of the case studies concluded that companies who had introduced teams had made favourable gains in performance and productivity. Two international experts gave presentations on the advantages of teams to the company’s management. These proved highly beneficial in giving the attendees informed knowledge and a deeper understanding of the pitfalls and gains that may be associated with teams, particularly productivity and performance improvements.

The project coordinator, a member of the human resource management department and the project manager visited several local and interstate automotive companies to observe their teamworking practices.

Upon returning, a recommendation was tabled with the steering committee that a delegation should visit selected companies interstate (chosen from members of the steering, advisory, implementation and resource groups). A questionnaire was developed based on the McKinsey 7-S framework (strategy, structure, systems, management style, staff, shared values and skills). Fifteen members from the aforementioned committees visited a number of interstate automotive companies. The group met and filled in the questionnaire after each visit, using a consensus process. Upon returning, each member was charged with disseminating the information gained from the visits to their work colleagues. A final report was presented to the steering and advisory committees, recommending the introduction of teams. The steering committee endorsed the recommendations and presented the report to the managing director, who approved the piloting of teams in principle. The steering committee appointed the manufacturing manager to lead and drive this change process and the planning process was then commenced.

(2) Planning phase

The steering committee developed the following framework for the planning phase.

- Identify external and internal influences impacting on the organisation, including:
  - Where are we now?
  - Where do we want to be in the near future?
  - How will we get there?
  - Will the introduction of teamwork help us get to where we need to be?

- Identify how the company can gain improvements in:
  - productivity
  - waste reduction
  - quality
  - attitude and behaviour of all employees
  - key performance indicators
  - workforce flexibility
  - developing a culture of cooperation and continuous learning
• Are work processes interdependent, requiring the integration of different processes/services from a number of different functional groups/departments and contributors? If yes, then:
• seek agreement of senior management and all stakeholders (including union(s) to implement a TBPS
• develop a corporate philosophy with emphasis on teamwork
• complete a gap analysis re previous vision and/or mission statements, strategies and work agreements to determine achievements to date
• design TBPS, including structure, timeframe, shared vision and reward system
• discuss TBPS program proposal with all stakeholders and seek endorsement
• appoint advisory committee (made up of functional managers, means of consultation and gaining commitment)
• identify business unit to pilot a TBPS (if resources are not an issue and the company decides to implement throughout, identification of business unit is not necessary)

The manufacturing manager established the goals and objectives to be achieved by this change strategy. The focus was to:

• improve efficiency, productivity and quality
• reduce absenteeism
• increase shareholder confidence
• increase return on training investment
• tap the full potential of all employees by creating an empowered and committed workforce
• create a responsible and accountable workforce

The steering committee charged the project coordinator and the project manager to design a suitable TBPS for the company, incorporating details on the type/style of teams and where they best fit in the organisation; the skills required by teams; leadership style; the level of decision making; a suitable structure and the necessary changes to systems for supporting teamwork.

A responsibility matrix (below) was developed for all positions within the company.

<table>
<thead>
<tr>
<th>Activity point</th>
<th>Step 1 - passive</th>
<th>Step 2 - informed</th>
<th>Step 3 - involved</th>
<th>Step 4 - proactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational structure</td>
<td>traditional</td>
<td>supervisor-centred</td>
<td>supervisor-coordinated teams</td>
<td>team leader-coordinated teams</td>
</tr>
<tr>
<td>Supervisor</td>
<td>direct and control</td>
<td>supervisor trained, assists in training of teams</td>
<td>facilitate and mentor team leader</td>
<td>plan and coordinate improvement plans</td>
</tr>
<tr>
<td>Team member</td>
<td>do as told</td>
<td>informed in all issues relating to operation</td>
<td>supervisor and team leader assist team to achieve agreed goals</td>
<td>team responsible and accountable for achieving team goals and KPIs</td>
</tr>
</tbody>
</table>
The investigation phase identified numerous types of teams that had been adopted within the companies visited: quality improvement teams, quality circles, cellular work teams, project task teams, directed work teams, semi-autonomous teams, cross-functional work teams, natural work groups, lean teams, supervisor-centred teams, self-directed teams, self-managed teams and autonomous teams. The investigation phase also assisted the steering committee to develop criteria to define these different types of teams, including the makeup of the teams' membership; whether the teams are temporary or permanent; their purpose and function within the company; the degree of technical multiskilling given to team members; the complexity of tasks and skills required; and the degree of self management and leadership devolved to the team.

Based on this analysis, the company decided to adopt a semi-autonomous style of teamworking for production. The current leading hands would become team leaders, and as they matured, they would take on more of the supervisor's role. The supervisors would adopt more of a coaching, planning and coordinating role. As the teams developed, more responsibility would be given to the teams, transforming them into autonomous teams. The steering committee also decided to adopt a cross-functional style of teams for senior, middle and first-line management functions.

(3) Implementation

The steering committee decided to adopt a low-key approach when introducing the pilot team(s), believing they would not get a second chance to introduce teamwork. Further, by using a pilot, they would find out for themselves if teamworking was appropriate for their operations.

The steering committee learnt from the investigation phase that implementing a TBPS would take time (up to five years) and considerable resources and must be carefully managed, especially in the early stages. Full cooperation, support and involvement from all stakeholders and personnel were seen as critical for success. Therefore, it was decided to select a pilot group in the first instance. If this was successful, then teams could be slowly introduced throughout the company. This would allow the company to use resources wisely and gain experience. Piloting would also allow the company to modify and refine a given approach before implementing it throughout the organisation. The implementation plan involved:

- selecting pilot area(s)
- selecting teams and membership by sub processes/services
- running information sessions
- determining meeting times, operating rules and reporting processes
- choosing a name
- determining team operating values
- determining team mission statement and goals
- determining team responsibilities and members responsible
- determining boundaries
- defining problems
- determining priority for solving problems
identifying improvement plan (Gantt Chart) to solve problems, including investigating existing conditions, analysis, counter measures, confirming results, standardising conditions, reviewing and reporting.

determining and providing appropriate training and support so that teams can effectively carry out responsibilities (on a just-in-time basis)

(4) Evaluation

after an appropriate time, evaluate pilots
record productivity information and compare with data collected prior to commencement
conduct organisational climate survey and compare data with original survey
if successful, seek endorsement to establish work groups throughout company

Performance data and results from the organisational climate survey have been collected. These results will be compared with the data collected at the end of the pilot phase. This timeframe has not as yet been set. Indications at this time suggest that this will not take place for another six months.

Results to date

The purpose of the climate survey was to determine the validity of cultural elements identified as important for teamwork; survey employee’s perceptions of these elements; identify if (and to what extent) there are differences in the relationships between these elements and employee work satisfaction; and identify employee’s perceptions towards the introduction of teams. With respect to employee’s perceptions to the introduction of teamwork, the findings indicate that:

- the introduction of teams and teamwork throughout the company will help this company achieve its vision: 62.5 % agreed
- the CEO’s level of commitment for introducing teams is very high: 37.5 % agreed, 50 % undecided
- the level of commitment from senior, middle and front line management for introducing teams is very high: 62.5 % either agreed or strongly agreed

These results indicate a relatively positive perception by employees for the introduction of teams. Further analysis of the climate survey data has identified that the extent of employee work satisfaction is influenced by goal setting, leadership, decision making, communication, motivation and teamwork.

A job diagnostic survey was also conducted. Its purpose was to evaluate the job design within the pilot area. The instrument chosen was the Job Diagnostic Survey (Hackman and Oldham: 1980). This instrument gathers information on perceptions of work processes, which are then compared with the results against industrial norms. Here, the results were higher than the industrial norms, indicating no further action was required.

The manager of the pilot area (also the program coordinator) transformed the implementation committee into a management cross-functional team (MCFT,
comprised of the manager plus two assistants). This team had responsibility for implementing the pilot. The manager introduced the change program via several meetings (information sessions) with this team and a second cross-functional team (SCFT) consisting of supervisors, team leaders and support staff. The initial focus of these information sessions covered: why the need for change; change to what; how best to introduce and implement teams; and how and when to measure effectiveness of the aforementioned changes. The major aims were to improve company performance (efficiency, productivity etc.) while at the same time improving the quality of work life for all employees.

To begin the process, the '5 S' program was chosen as a launching tool (a visual management program widely used by Japanese automotive companies). The first stages of this program focused on workshop cleanliness and safety, in alignment with the company's key performance indicator of safety. After training in the 5 S program, the SCFT implemented it within their work areas. Starting with the first stage, 'SORT', each supervisor and their team leaders involved all group members in identifying what equipment was needed, where it should be stored and what was not required. Engineers, technical, maintenance and support personnel were also required for this process. Excellent results have been achieved; this program has now been adopted by all supervisors within the business unit and is slowly spreading throughout the company.

The housing of the SCFT was another important initiative undertaken. A new office was built to house all SCFT team members (located in the production area of the plant, with easy access for all production personnel). Selected team leaders were given responsibility to assist supervisors with managing and running daily production, thereby releasing supervisors to take on their responsibilities of planning, coordinating and facilitating. This change has taken time and is a slow process. In this transition phase, supervisors are still responsible for supporting their team leaders in daily production. All of the supervisors and team leaders know and understand that meeting production requirements is their primary objective.

Next, the SCFT and the MCFT agreed to a performance improvement goal of 5% across all company key performance indicators. This was in line with the company's yearly performance improvement plan. The training program chosen for this process was the 'enterprise review program', a planning tool designed by Munzberg Consulting. The manager trained the MCFT and the SCFT in this program and then commissioned each supervisor to develop their own area improvement plans. These plans were subsequently presented via weekly meeting to the MCFT and SCFT. Negotiations then occurred with each supervisor with respect to their goals and the plans to achieve them. These plans were further refined and presented to the aforementioned teams. A yearly timing chart incorporating the detail of each supervisor's plans (what could be achieved, by when and at what cost) was developed and displayed in the work areas of the MCFT and SCFT. The area plans of the department and individual supervisors were then tabulated and presented to senior management as the yearly performance improvement plan.

Each supervisor was then asked to work with their respective team leaders and work groups to establish their plans. The only boundaries set were that each plan must align with the company's targets and key performance indicators and that team leaders must involve their work group to develop these plans (gain ownership).
During this process, it was constantly stated and reinforced that these plans were flexible and could be revised at any time. These improvement plans were then broken into monthly targets to be achieved. Each month (via a combined meeting of the MCFT and SCFT), the teams reviewed the improvement plan's progress via reports from each supervisor. In some areas, monthly targets had not been met. External factors such as changing production demands and/or situations occurring in other departments created a flow-on effect. However, with all of the SCFT knowing each other's plans and goals, they pulled together, pooled resources, overcame their shortfalls and met their targets.

The implementation of the pilot project is still in the transition phase at this stage. Teams have not yet been introduced into all individual work groups within the pilot area. However, there is one pilot team. The team's supervisor is housed within the work area and is playing the important role of coaching the team leader and leading the team. This team has completed a workplace redesign. With assistance from support staff such as engineers and maintenance workers, they redesigned their line layout. They have also designed new jig fixtures, which increased their productivity by decreasing their manpower requirements by one and one-half heads over two shifts (3/4 head per shift). By redesigning their line layout (in one day), they have increased their productivity by 10%.

Anecdotal evidence (observations, talking to the team members, the project manager and the team leader) indicates an increase in morale within the team. Weekly performance data shows that absenteeism has fallen from 6% to 1.3%. Team cohesion indicators also show promising signs. Collectively, the team is helping members who are on restricted duties (i.e. Workcover, with rehabilitation plans) to identify work duties they are capable of carrying out. As these duties are not strictly to the Workcover rehabilitation plan, the team have organised for the Workcover rehabilitation plans to be changed. This has minimised the rehabilitation period for these workers. The team members who were on these plans have reported feeling more comfortable with the new arrangements, because they are now contributing to the team. The pilot team is now starting to chart its own performance (key performance indicators). These charts are displayed within their work area and are updated daily by team members. The team is given its daily production requirements and all other relevant information. By charting their daily performance, they can see improvements resulting from their own suggestions.

At one stage, the manager changed the team's supervisor, a decision that turned out to be wrong. The new supervisor had a different management style. Productivity stagnated and all key performance indicators figures suffered. As the only change within the team was the leadership, the manager realised that he had the wrong person in the wrong job (this new supervisor is excellent at planning and technical aspects of production, but not at leading a production team). The manager has since reported gaining an awareness of the importance of matching the right person to the right job and the critical role of leadership in teamworking. The original supervisor has now returned to the team.
Where to now?

The MCFT is continuing to achieve goals set by the team by reviewing its plans monthly, and where necessary, fine-tuning these plans utilising the services of all support staff (managers, engineers, maintenance etc.). For example, maintenance personnel have been asked to develop a plan to assist the pilot team to improve their quality output. The team has indicated that it wants things to be right for its customers. The team’s present quality standards meet specification, but the team believes that by adopting a continuous improvement process, it can improve quality output. The pilot team has asked maintenance personnel to develop a plan that will enable it to achieve this. Maintenance personnel have undertaken this task and are regularly updating the team on its progress. The manager has stated that, as the team members further develop their technical, managerial and group skills, more responsibility, accountability and autonomy will be devolved to the group.

An interesting issue has surfaced due to the introduction of key performance indicators that could prove detrimental. The company has a suggestion scheme that is premised on rewarding suggestions from individuals and not teams. In 1998, suggestions from this team totalled 38. For the first part of 1999, there have only been five. Because of the introduction of teamworking, all suggestions have been managed within the team. They have also been implemented as part of their daily activities. This raises the question of how to reward the team for their efforts, particularly since this group has set, and so far achieved, a 5% improvement across all key performance indicators. To alleviate this potential problem, the manager has not removed the 1.5-head savings made by the team. Once the team’s production schedules are achieved and all housekeeping duties finalised, the time saved is used for team meetings. This is only a temporary strategy that the manager believes needs addressing.

Conclusions

Time, available resources and external factors have hampered the progress of this manufacturing organisation in implementing a team-based production system. Briefly, such external factors included the Australian government tariff review, new training reform agenda, union elections (state and local), development of competency standards, Workcover audits, day-to-day industrial issues, the evaluation of new training programs, new product design and ramp up for new product production. Most importantly, the need to meet daily production demands was a significant external factor.

A noteworthy outcome of this study is a deeper understanding of team-based production and the change process. This study further reinforces the importance of fully understanding the dynamics of change. Dawson (1994: 182) notes that it is no longer appropriate to expect long-term stability, followed by change, followed by long-term stability. Organisational transition should be seen as an ongoing process that may be developed from partial incremental change, as well as by the formation of corporate strategies involving large-scale change. Change is no longer a process of unfreezing the organisation, changing and refreezing. Change is constant in today’s environment. It is one of the constant pressures and major challenges facing modern organisations today. The capacity of an organisation to manage the ongoing process.
of change in turbulent and dynamic business markets will determine its future.

The limitations of this study are primarily due to the limitations of time, politics, available resources, the influence of external and internal constraints and the dynamics of change. These limitations have been aptly expressed by Kanter et al (cited in Dawson, 1994: 180), who have stated:

Managing change today is usually managing a cascade of change; most people are bleary-eyed with their 'change agendas' ... Yet the more we have studied change, and the more we brush up against its effects, the more humble we have become about dictating the 'best' way to do it.

Acknowledgements

The author would like to acknowledge and sincerely thank the Department of Industry, Science and Resources (Canberra) for their financial support. He would also like to acknowledge the Australian automotive manufacturing and product manufacturers who graciously gave their knowledge and time.

References


Teamworking: some international perspectives


Perspectives on leadership and membership
Behind entrepreneurial flair and the giant corporation: the role of kaizen and technology transfer instructors as work-based learning facilitators in overseas transplants

Barry Elsey
International Graduate School of Management, University of South Australia

Asahi Fujiwara
Chukyo University, Nagoya

This study examines the work of kaizen and technology transfer instructors in the overseas transplants of Toyota, particularly with regard to their role as learning facilitators. To date, little has been specifically written about the 'people factor' and learning dimensions of the Toyota Production System (TPS). Data on over 200 of these kaizen and technology transfer instructors is reported, drawn from a sample of these specialist workers derived from the many plants that comprise the production epicentre of Toyota City in Japan. Insight is provided into how these workers prepare for their overseas transplant assignments, the methods they use to instruct other workers and the kinds of problems they experience in relating to and communicating with foreign employees of Toyota. To provide a contextual and conceptual setting for the case study, this paper maintains a strong link with Japanese and English language literature.

When everything is going well for capitalist enterprise, it is natural to be especially impressed with the combined force of entrepreneurial flair and the industrial might of the giant corporation. Together, they can be compared with a hugely successful winning sports team. But behind the hyperbole that attracts itself to success in any field of human activity is a great deal of attention to detailed preparation, for example the intelligent thought that goes into strategic planning and tactics, the coaching and training and other kinds of 'backroom' learning. Such is the case with automotive manufacturing and production. Achieving a competitive edge in a truly global industry depends upon many factors, some of them taking the form of quiet achievement. A notable example is the role of kaizen and technology transfer workers as workplace learning facilitators. They are chiefly responsible for ensuring that the production system operates at optimal efficiency and highest quality standards (zero defects). These experienced production and management workers are the equivalent of the 'backroom' staff in the soccer club. The assumption tested in this paper is that they perform a vital learning and facilitation role, underpinning the spirit and form of capitalist enterprise.

In undertaking a thorough search of the literature in both the Japanese and English languages, little was found which focused on kaizen and technology transfer workers in the automotive industry. A gap in knowledge was therefore identified. This became one rationale for the research, and another was the emphasis given in the literature on systems of production and continuous quality improvement. In the collective mind-set of the literature, the interest in improving systems (such as the Toyota Production System) seemed almost purely abstract, with little or no attention given to the human resource or people factor. This paper does the opposite. By
focusing on kaizen workers, it also adds a useful insight into the understanding of systems of production, notably in an industrial manufacturing context. It was long ago recognised in socio-technical systems theory that the human dimension goes together with the tools of technology. This paper contributes to such an understanding by describing the roles and work behaviour of the people that make systems operate effectively.

The study

First, it is useful to set the empirical and interpretive data findings of the 240 Toyota kaizen and technology transfer workers into context. A summary presentation of these findings follows. Descriptive data, such as their employment and demographic details, is followed by more analytic material, in which the survey respondents report their own perceptions and experiences of various aspects of the work role. Special attention is paid to their role as learning facilitators. In keeping with the spirit of kaizen, the respondents were invited to suggest quality improvements to the work they carried out. Reporting both the descriptive and analytical aspects of the research might be regarded as a kind of atheoretical sociology of work and learning audit. Altogether, the data is used to throw light on the workers’ learning facilitation role. At a more conceptual level, the paper is openly speculative in posing the question of whether, by accident or design, Toyota’s kaizen and technology transfer instructors deskill workers in overseas transplants. Discussion of this issue concludes the paper.

The research data is based on a case study of 240 workers employed by Toyota, one of Japan’s leading global automobile manufacturers. The study draws a link between the Japanese concept of kaizen, which simply means continuous quality improvement, with many characteristics common to the theory and practice of work-based adult learning. These include the process of teaching or organised instruction, knowledge and skill transfer, multiskilling, competent mastery and performance of tasks, effective interpersonal communication, motivation to understand, tenacity in learning, applying intelligence to make informed judgements and ‘drawing out’ innate and potential abilities. Taken together, these activities and outcomes represent some of the ideal features of adult learning in almost any context. It is the purpose of this paper to make that connection. The description and analysis of the work-based learning role undertaken by Toyota’s kaizen and technology transfer instructors (as they prefer to be called) provides the core material for the paper.

The origins and roles of kaizen

The connection of kaizen with the spirit and form of business and entrepreneurship is indirect. Toyota, for instance, owed its phenomenal growth after 1950 to the Korean War, through a special military procurement policy. However, the foundations of the ‘look and learn’ kaizen philosophy of the company stems from the vision of the Toyota family to improve upon American production methods. Kaizen has its origins in the environment of industrial production. In this paper, the term applies to expatriate workers who are sent by Toyota to overseas transplants for varying lengths of time and complexity of assignment. Their overall purpose is to ensure that the Toyota Production System (TPS) is operating in accordance with the goals of ‘lean production’ and stringent quality assurance standards, as these are regarded as key factors in corporate competitive strategy.
In broad terms, there are three types of kaizen and technology transfer workers. The first group, ‘white-collar’ managers, are usually sent to overseas transplants to acquire experience of working in what Toyota refers to as ‘child companies’. For them, the focus is almost exclusively on cultural transfer of the kaizen philosophy into all aspects of the overseas transplants. Members of a smaller second group, sometimes described as ‘grey-collar’, occupy a position midway between managers and supervisors, focusing on specialised technical matters of production such as robotics and other forms of automation. The larger ‘blue-collar’ group comprise supervisor-level production line workers, covering all aspects of the TPS. As the description implies, the three groups of kaizen and technology transfer workers have a special focus on technological know-how and skills, particularly whenever a new model is phased into production and adjustments are required to the functioning of the TPS. These workers thus represent the people factor, or what one writer has termed the ‘humanware technology’ in the change management of production technology knowledge (Shimada, 1988).

Contextual and conceptual background

The post-1945 Toyota story
The spectacular recovery and growth of Toyota since 1945 owes something to the fortunes of the Korean war, economic protectionism instigated by the Japanese Ministry of International Trade and Industry (MITI) and the company’s own competition strategy (Cusmano, 1991; Horsley and Buckley, 1990). In the first instance, special procurement for the United States military boosted production and provided the capital resources for subsequent entry into the private car market. The MITI erected high tariff barriers on imported foreign cars, providing a shelter for Japanese manufacturers. Unlike other Japanese automobile companies, Toyota took only a lukewarm interest in forging foreign alliances, instead concentrating on in-house technological innovation and perfecting its production system. These activities became its competitive strategy, in which quality-made, economical and reliable cars were produced at lower cost.

With the appreciation of the Japanese currency and partly as a means of reducing ‘trade war’ friction, like many other successful Japanese enterprises, Toyota pursued a policy of Foreign Direct Investment (FDI). This led to Toyota establishing overseas transplants in many countries and continents. To ensure that overseas ‘child companies’ performed in accordance with Japanese-based plants, it was necessary to achieve and sustain the same level of technological innovation and management capability. The TPS had to become a universal template. In this regard, kaizen and technology transfer workers are comparable to midwives for Toyota’s operations. They have to bring together and manage the various forces and relations of production (capital and technology, knowledge and human resources) to sustain Toyota in its global competition.

The Toyota Production System and related concepts
The TPS comprises two main pillars: Just-in-Time (JIT) and Jidoka, or ‘automation with a human touch’ (Imai, 1986; Monden, 1994; Nakamura, 1996; Ogawa, 1994, 1996; Ohno and Mito, 1986; Shimokawa, 1985). The former refers to inventory management; practical ways of ensuring that at each manufacturing stage in the
Behind entrepreneurial flair

chain of production, only the correct number of products are supplied when required on time. The underlying purpose is to smooth out the production process and eliminate wastage and other kinds of inefficiency. JIT is also a practical philosophy whereby at each stage of production, the next in line is regarded as a customer with the right to expect quality service and complete satisfaction. Jidoka takes the operation of automatic sensors, used to detect defects and wastage in production, as a metaphor for workers who are trained to exercise 'visual management' and carry out the same functions.

As already indicated, kaizen is about quality assurance. It supports the TPS in two main ways. One is through the formal emphasis on 'groupism' and teamwork, the improvement suggestion scheme, the zero defects group and quality circles. The second way in which kaizen exerts an influence is to expect employees to solve problems quickly and to work with a conscious awareness of the importance of quality assurance. Team leaders (supervisors) play their part in encouraging production line workers to actively think about quality improvements.

Technology transfer is the process involved in standardising production methods, by ensuring that workers understand technical knowledge and skills and can effectively apply various technologies and techniques, regardless of location and cultural differences. At the most basic level, it involves a didactic process of instruction and learning by imitation and repetition. The process is dignified by describing it as 'managerial technology transfers', and others have drawn distinctions between 'soft' and 'hard' versions. All recognise the pivotal role of work-based learning in transferring technical information, know-how and techniques (Ogawa, 1994, 1996; Sedgwick, 1996). Toyota relies on the part played by people - by workers with expertise and experience in acting as instructors, rather than on media-driven communication, although instruction manuals are considered useful as back-up. Human learning is regarded as the vital element for determining the long-term success factor in transferring 'hard' technology. Hence there is an increasing use of expatriate workers by Toyota, as global operations multiply and become more complex.

Research design and methods

A survey questionnaire was the main instrument used to collect data from 240 kaizen and technology transfer workers spread throughout the 12 plants that make up the Toyota City epicentre in Japan. After explaining the purpose of the study, a senior employee facilitated access to the workers, acting in an informal and voluntary basis. This 'inside' helper reproduced the survey instrument, reached workers through personal contacts and collected and returned the completed questionnaires. With such an opportune sample, it was not possible to exactly determine the research population. However, other Toyota informants vouched that the resultant sample broadly represented the particular cohort of workers.

The questionnaire was first designed in English and then translated into Japanese. It was piloted with a small group of Mitsubishi workers performing the same kind of job in the Adelaide plant in South Australia. The Japanese language version was independently verified for semantic accuracy. The questionnaire was comprised of 33 main items: 16 required descriptive answers (such as employment and
demographic details) and the rest were more analytic, inviting respondents to comment and make superficial judgements about key aspects of their work. A few follow-up interviews were conducted, but for practical reasons, it was not possible to make this approach a main research strategy.

Findings

For economy and simplicity, only the main findings are highlighted. Instead of repeating the full title 'kaizen and technology transfer instructors', the shortened term 'workers' will be used. The total sample amounted to 240, but not all respondents gave answers to every question item, as is typical in survey research.

Employment and demographic characteristics

1. Kaizen workers in the sample were long-serving Toyota employees. For example, 205 workers or 85.5% had worked for Toyota for more than ten years. They were experienced and knowledgeable workers, typically at a supervisory level or above.

2. White-collar workers in managerial positions comprised about one third of the sample. The rest were mainly blue-collar, production-line workers who performed much of the hands-on instruction to employees in overseas transplants.

3. Nearly two-thirds of the respondents fell into the 30-50 year age group. Another 16% were over 50 years of age. This suggests that age and experience go together in overseas transplant work. Over 40 years of work with the company was considered lifetime employment. Production-line workers were recruited from the age of 18, and trainee managers after university graduation.

4. There were only two female workers in the sample. They were assigned to instructing in computer-assisted design.

5. Reflecting the employment policies in Toyota, the majority of workers had either graduated from high school or university (58% and 28% respectively). Older workers were more likely to have completed their schooling at an earlier age (usually at 14 years). In some respects, the length and level of formal education is only a baseline. Thereafter, Toyota concentrates effort on training off- and on-the-job.

Selection for overseas transplant work

Means of selection of workers for overseas transplant assignments appeared to fall into two categories. Most workers were selected through recommendation by superiors (63%). This was not patronage, but company practice and recognition of knowledge and skills related to the task requirements. Indeed, the next most cited reason for selection was recognition of workers' experience and competence in using new technology (44%). A different kind of selection was perceived as a reward for loyal service (20%). While seemingly patronising, this selection was likely for the same reasons given above. A smaller number simply volunteered (8%). This method of selection would undoubtedly involve assessing their knowledge, experience and competence. A small number could not say how they were selected (9%). It is likely
that behind the merit selection lies an identification of suitable ambassadors for Toyota, able to model its corporate philosophy and values.

**Types of kaizen and technology transfer work in overseas transplants**

1. The normal length of overseas assignment was up to three months, more for managers and sometimes less for production-line workers, depending on the task. Upon closer inspection, a two-week assignment was common for around half of the respondents. About 60% of the sample had worked in overseas transplants three times and another 15% had done so more than ten times.

2. Toyota’s overseas transplants cover all major continents. By far the greater number of workers had spent time in United States plants (45%), with Thailand (21%), the United Kingdom (17%), Taiwan (16%), Australia (15%) and others trailing behind. These figures simply reflect the level of production in the biggest and richest markets and to a lesser extent, the set-up times for establishing an overseas transplant. The main reason for working overseas coincided with the production of a new model (56%). The kaizen concepts came into being most definitely when workers claimed they were sent overseas to improve the functioning of transplants or subsidiaries (30%). A more specific reason was to work on an existing model (22%). A smaller number were involved in factory planning and preparation (16%).

**Preparation for kaizen and technology transfer work in overseas transplants**

The sample of workers were asked to report on two kinds of preparation before going to an overseas transplant: in-house and self-preparation.

1. Over half (54%) claimed they had attended some kind of in-house preparation given by Toyota under its expatriate management program. Perhaps surprisingly, 46% said they had not. This might be due to the fact that Toyota increasingly relies upon short-tenn assignments, often organised at short notice.

2. There are three main types of in-house preparation. Language instruction is most common, with 86 of the 124 respondents citing participation, mainly in English. The second most common preparation was the development of specific skills in expatriate work, where 25 attended such programs as teaching skills to foreign workers and other kinds of cross-cultural communication. Lastly, 12 workers claimed to have carried out specialist work on some technical aspect of technology transfer in relation to the TPS.

3. 105 (44%) workers claimed they had undertaken self-preparation, some a great deal. This commitment appeared to increase with the length of overseas assignment, particularly in learning English.

4. As expected, the more specific self-preparation included learning a language (146 responses), or some aspect of the TPS in relation to an overseas transplant (129), learning something about the history and culture of the host country (74), or obtaining a background briefing from superiors and other experienced expatriate Toyota workers.
Work methods
Given the special focus on work-based learning facilitation, it is important to know how these workers practically approach their assignments in overseas transplants. A number of related questions were asked.

1. 30% of workers reported that they thought their own approach to instruction was influenced by Toyota practices, while 32% perceived little or no direct influence. The remainder had a neutral opinion. It is easier to agree with the views of the first group, as there seems little room for variation in instruction; the production methods and knowledge requirements are precise. Customs and practices are important, except where new technology and particular problems demand a different approach to problem solving. Those that perceived little direct influence often had more experience with the tried and tested methods of working acceptable to Toyota.

2. As for particular methods, demonstration was the major means of instruction (70% or 172 responses from eight choices), with emphasis upon 'look and do', sometimes relying on non-verbal communication and using language interpreters to convey ideas and information. Likewise, individual practice was frequently employed (66% or 158 responses), usually following an instruction and demonstration session. Another common practice was 'question and answer', which fit with instruction and demonstration sessions (48 workers). As a back-up, instruction manuals were used by a reported 93 workers and a small number showed films/slides (10 workers). A rather more unusual method involved using the best learners as instructors (79 workers) and employing small group work (41 workers).

3. Like their teacher counterparts, instructors were usually interested in assessing the effectiveness of their methods. The findings show that making their own judgement was considered appropriate (141 responses from four choices), while 70 workers asked the learners for feedback. Somewhat unusually, 47 workers said that they asked their superiors.

4. Reported by 67 workers, other methods included observing the work of learners and judging work outcomes against set production targets and quality standards. Very few reported that they sometimes conducted on-the-spot tests to assess new skill application.

Taking responsibility for learning outcomes
Related to the previous question, workers were asked how much responsibility they had for learning outcomes, once their immediate instruction sessions had concluded. This question implied allocation of responsibility for learning to the instructor, learner or the company. Not surprisingly, the workers took positive responsibility for ensuring the effectiveness of technology transfer instruction (70% of responses). The idea of 'Toyotaman' is reflected in this finding, where workers take pride in their work and responsibility for quality assurance. It is unclear why 16% of the workers disagreed with this view. However, in another response, 33% thought that the problem of effective learning and application of new technology belonged to the management and workers of local plants.
Communication and language interpretation
The effectiveness of instruction and learning is to some extent conditioned by language and interpersonal communication. A number of questions were posed about these aspects of the relationship between instructors and learners in overseas transplants. With regard to language, it was quite common for instructors to explain ideas and give information in Japanese or limited English (few in the sample spoke good English or other languages), depending upon interpreters or non-verbal communication skills.

In addition to determining the number of workers who considered themselves reasonably proficient in languages other than Japanese, views on other language-related issues were sought. The main findings were as follows:

1. In response to a question asking workers to self-assess their confidence in using a foreign language in an overseas transplant, 57 (24%) claimed they could just about manage to communicate for instructional purposes. A further 112 (47%) said they could only use another language with difficulty, and 59 (25%) claimed usage for greeting purposes only. Therefore, two thirds of the workers could not rely upon their own foreign language ability to communicate and instruct.

2. Language ability was considered a strong criterion for selection to undertake kaizen and technology transfer work. However, more than 60% of the workers thought that basic language skills should be a prerequisite for instructing non-Japanese workers. Within that number, there were some workers who regarded good language skills as crucial for learning purposes (22%).

3. Taking the position that most workers could at best use another language only with difficulty, it follows that they must depend upon other means of communication in an instructional setting, to achieve good learning outcomes. One obvious strategy is to use interpreters. Surprisingly, this did not apply to 24% of workers, who claimed that they had never used interpreters. Upon further investigation, these included workers with a level of language competency suitable for instructional purposes. On the other hand, 35% of workers claimed to use interpreters regularly, and a further 41% employed them sometimes. The key point is that whether or not workers had sufficient language ability or depended upon interpreters, their learning outcomes reached a level acceptable to Toyota’s stringent quality assurance standards. This suggests that the ‘showing and doing’ method of instruction and communication works effectively for most purposes.

Interpersonal communication with overseas transplant workers
A number of questions were posed about the aspect of kaizen work concerned with social relations, i.e. the efforts made to get close enough to ‘child company’ workers, such that everyone feels reasonably comfortable communicating with each other at the factory floor level. The main findings were:

1. Most workers (93%) made an effort to get to know local transplant workers, finding the process of getting to know local workers either easy or at least not difficult (54% altogether). The rest were less positive, but only a modest number (27) said they found it a difficult experience. In looking into this aspect more closely, about half of the sample thought that their own attitude and behaviour was the main problem in getting to know local transplant workers. Few thought
that the problem lay with local workers. This supports the common view that Japanese people are often shy and reticent with foreigners.

2. A partial explanation for the difficulties some workers had in reaching out and forming personal relationships with foreigners might be attributed to their different approaches to work. There is a danger here of employing stereotypes, such as the view that the Japanese work harder, longer and are more self-sacrificing. The findings reflect no clear view one way or another. However, some workers were ready to offer a few simple explanations, such as differences in culture (religion, ways of thinking) and economic standards (comparing Japan with third-world countries housing Toyota transplants).

It is necessary to return to these language and communication matters later in discussing learning facilitation. Before then, it is useful to obtain an overview of how these kaizen workers generally comprehend the satisfaction of their work in overseas transplants.

General views about kaizen work experiences

Altogether, five aspects of work were presented to the workers, about which they were invited to respond on five-point scales regarding: interest level, challenge and creativity, sense of achievement, satisfaction and frustration. Given the strong corporate culture in Toyota and its kaizen philosophy, it was hardly surprising to find that most workers adopted a positive position. For instance, 190 workers indicated that they found the work interesting, 156 regarded the work as creative and 180 as challenging, and 186 said the work gave a sense of achievement. As expected, about the same numbers considered the work satisfying. Some workers were prepared to admit that they sometimes found the work frustrating (83). This might be related to language and communication difficulties, although the connection was not examined.

In keeping with the spirit of kaizen, workers were invited to comment on ways and means of improving the work they did. Altogether, 187 workers (78%) responded. The main point made was that more attention needs to be paid to creating better awareness of the difficulty of communicating in the cross-cultural setting of an overseas transplant. The biggest problem centred on the use of language, expressing the frustration of being unable to communicate the real meaning behind the words.

Part of the cultural sensitivity was to avoid putting across the idea that all things Japanese and from Toyota headquarters were superior. Such a view was seen as a way of encouraging worker motivation in overseas transplants and taking self-directed responsibility for quality assurance. Linked to this view was the idea of making more effort to find the best learners in overseas transplants and develop their knowledge and skills as local instructors. This would also include the practice of sending such local workers to the main plants in Japan, for intensive development.

Discussion: learning theory and facilitation

In the context of economic globalisation, two forces are commonly accepted as driving the achievement of a competitive edge: technological innovation and
competent human resources. Toyota and many leading manufacturers recognised these forces long ago. Hence, Toyota places great value on continuously improving its production system and disseminating the kaizen philosophy throughout its workforce. This paper has not focused direct attention on the TPS, but instead attended to the role of kaizen workers as the human resources connecting technology with people. Much of the data findings presented above either directly refer to learning or assume its presence and importance. Equally, kaizen workers are accorded a central role in the facilitation of work-based learning. More specifically, their work in overseas transplants has been at the heart of this paper. As one Japanese writer describes: 'Skilled Japanese operators fly to the country concerned and give practical demonstrations. Local operators observe these demonstrations and use their "muscle memories" to learn the required skills through hands-on practice' (Ogawa, 1996: 141). This paper has provided insight and information into the nature of their work, from the initial stages of selection and preparation, to the actual tasks they undertake, the problems they face and what they think about their work, including views on 'room for improvement'.

Particular note has been made of the language and interpersonal problems they experience, because these form part of the climate and process of work-based learning. Even though kaizen workers performed their instructional tasks and passed their knowledge and skills to local workers in order to reach the quality standards set by Toyota, they recognised room for improvement in these aspects of their role. Perhaps because these kaizen workers were successful at doing their work, they had few specific contributions regarding improvement of approaches to learning. Within the instrumental context of learning for the purposes of the production line, their work was considered good enough by all concerned.

Taking a closer look at their approach to learning, as methodologists, these workers embrace the behaviourist school and to a lesser extent the cognitive-Gestalt school, whereby learning through experience leads to an understanding and integration of technical knowledge. This accords with the kaizen philosophy, with its emphasis on 'visual management' in order to identify and solve production-type problems. Indeed, much of what kaizen and technology transfer instruction is about could be incorporated into Gange's eight levels of learning, with problem solving at the top of the hierarchy (Burns, 1995: 123). It should be noted that this view confines itself to instrumental and technical-focused learning, located within the context of the automobile production line. Such a narrow definition precludes reflection about the nature of learning in more open contexts. In summary, kaizen workers perform their learning role capably. Given the nature of the tasks they undertake, it is difficult to suggest changes and improvements.

Conclusion

Kaizen workers take their work seriously, with obvious enthusiasm and commitment. They regard themselves, perhaps with some shy reticence, as knowledge and learning specialists, dedicated to the smooth operations of the TPS and the kaizen philosophy. Here, this was evident in their strong focus on working effectively with other Toyota employees in the overseas transplants. This work behaviour combines thinking with doing, not a separation between them. More than that, the know-how these workers possess is driven by their need to communicate or
transfer it, thus facilitating the learning of others. Given the changing nature of modern technology and innovations with more flexible production methods, the knowledge and learning becomes more complex, not less. At this juncture in their work, it is difficult to regard them as deskilling other workers.

The assumption that gave impetus to this paper focused on the role played by kaizen workers as learning facilitators. The research findings reasonably support this argument. Another, more general assumption is that they play a 'backroom' role in supporting the systems and operations of the large-scale and complex organisation; a vital cog in the vast machine of the corporation. In a much more distant and indirect way, they also support the endeavours of the entrepreneurial and other 'cutting edge' activities of the corporation, demonstrating that a modern capitalist organisation is an interdependent enterprise and more than the sum of its star players.

References


Is your team leadership/management year-2000 compliant? A literature review

Richard Williams
Adelaide Institute of TAFE

This literature review presents a summary of the management vs. leadership debate and an analysis of the qualities required in managers and leaders and their suitability for taking organisations into the next century. Some long-held assumptions about leadership and management are being reassessed. Consequently, administrators are also having to reassess their existing abilities and practices. The concepts of self-management and of working in teams are receiving a lot of exposure in the literature. This paper analyses how administrators need to consider the applications of team theory to improve performance, and discusses the type of environment necessary for teams to flourish.

Changes in thinking about management

A review of the literature reveals that there has been a significant number of paradigm shifts with regard to thinking about management in the last 150 years, and it seems as though the shifts are occurring at an ever-increasing rate since the term 'manager' was coined in the 1830s. Twenty years ago, Levinson (1978: 317) argued that the scholarly study of leadership was in a transitional period, where 'the major tasks are to reappraise the existing structure, explore new possibilities ... and work toward choices that provide a basis for a new structure'. Soon after, it was further argued that while it was not simple to predict what the new model would be, it would probably be highly pluralistic, with 'different models for different purposes, in contrast to one or a few grand models' (Hunt et al, 1982: 6).

Kanter (1989) has said that: 'Managerial work is undergoing such enormous and rapid change that many managers are reinventing their profession as they go'. This is because of what Kissler (1991: 23) has described as the 'strong, turbulent and disturbingly unpredictable forces' which constantly impact.

One of the outcomes of this process has been the 'management vs. leadership' debate and the associated decline in the use of the term 'manager', or its use in the pejorative sense. It seems that the term 'leader' is more politically correct, and references have been made to:

- structures with self-directed teams
- structures with semi-autonomous work teams
- structures with self-managed work teams
- team members being 'empowered'
- organisations being complex systems of social networks and technical processes

A bipolar approach to this indicates that there are two alternatives for managers, if they are to be competitive in the global marketplace:
(1) they will become extinct - are managers needed in self-managed work groups?
they will have to undergo a major transition in thinking and philosophy

Management vs. leadership

The ‘management vs. leadership’ debate has been progressing for more than twenty years, since the time when Zaleznik (1977) published his pioneering article ‘Managers and leaders: are they different?’ The article sounded what Terry (1995) described as a ‘warning alarm’; that our society is destined for difficult times if we fail to develop individual leaders. The tone for the debate was set by the comment that:

... organizations are caught between two conflicting needs: one, for managers to maintain the balance of operations, and one for leaders to create new approaches and imagine new areas to explore. (Zaleznik, 1977: 67)

Zaleznik (1977: 67) further elaborated:

One might well ask why there is a conflict? Cannot both managers and leaders exist in the same society, or even better, cannot one person be both a manager and a leader?

This was an interesting question for him to pose, because his paper clearly falls into the ‘manager bashing’ category.

Zaleznik argued that our bureaucratic society has a tendency to develop managers as opposed to leaders, a practice which he saw as being detrimental to the organisation in particular and to society in general, since it cultivates bureaucratic conservatism. According to Zaleznik, the ‘managerial mystique’ perpetuates the ‘cult of the group’ over individual leadership and ‘does not necessarily ensure imagination, creativity or ethical behaviours in guiding the destinies of the enterprise’ (1977: 67). This type of bureaucratic structure is often criticised for being unable to systematically provide for the personal growth and development of workers, particularly the large numbers at the base of the pyramid.

Zaleznik further argued that managers could not be leaders, because they are more like ‘tinkerers’ who use inadequate trial-and-error solutions. He expressed this quite clearly thus:

A technologically oriented society and economically successful society tends to deprecate the need for great leaders. Such societies hold a deep and abiding faith in rational methods of solving problems, including problems of value, economics and justice. Once rational methods of solving problems are broken down into elements, organised, and taught as skills, then society’s faith in techniques over personal qualities in leadership remains the guiding conception of a democratic society contemplating its leadership requirements. But there are times when tinkering and trial and error prove inadequate to the emerging problems of selecting goals, allocating resources, and distributing wealth and opportunity. During such times, the democratic society needs to find leaders who use themselves as the instruments of learning.
and acting, instead of managers who use their collective experience to get where they are going. (1977: 70)

Table 1 is a summary of Zaleznik’s distinctions between managers and leaders. These distinctions are similar to those espoused by Bennis and Nanus (1985: 21), who have written:

The distinction is crucial. Managers are people who do things right and leaders are people who do the right thing. The difference may be summarised as activities of vision and judgement - effectiveness versus activities of mastering routines - efficiency.

Covey (1996: 154) has used similar terminology, but provided a concrete example:

Leadership focuses on doing the right things; management focuses on doing things right. Leadership makes sure the ladders we are climbing are leaning against the wall; management makes sure we are climbing the ladders in the most efficient ways possible.

Table 1 (adapted from Zaleznik, 1977)

<table>
<thead>
<tr>
<th></th>
<th>Managers</th>
<th>Leaders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal orientation</td>
<td>• adopt passive attitudes to organisational goals</td>
<td>• adopt active attitudes to goals; exert influence over their direction</td>
</tr>
<tr>
<td>Work concept</td>
<td>• see work as an enabling process, where people establish strategies and make decisions together</td>
<td>• seek out risk and danger</td>
</tr>
<tr>
<td></td>
<td>• focus on how things get done</td>
<td>• focus on what events mean to people</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• tend to attract strong feelings in others</td>
</tr>
<tr>
<td>Sense of self organisation</td>
<td>• are regulators</td>
<td>• have an identity not bound to their organisation</td>
</tr>
<tr>
<td></td>
<td>• have an identity based on their organisation</td>
<td>• are caught up in constant struggle to attain order</td>
</tr>
<tr>
<td>Purpose and mission</td>
<td>• are ambiguous or silent</td>
<td>• send out clear signals</td>
</tr>
<tr>
<td>Coping with the mundane</td>
<td>• are tolerant</td>
<td>• treat it as an affliction</td>
</tr>
</tbody>
</table>
An alternative viewpoint, commonly expressed by advocates of Servant Leadership, is that climbing correct ladders has little to do with either leadership or management. Rather, it is an individual matter about values and priorities. If we cannot distinguish between the important and the unimportant, we may find ourselves climbing ladders to success and fail to realise they are leaning against the wrong wall. Kotter (1990) is another author who has explored the emerging differences between management and leadership at senior levels of organisations. A summary of his interpretation is included in Table 2.

The question many have tried to address is not really concerned with the differences between management and leadership, but rather: 'where have all of the leaders gone?'

Table 2 (adapted from Kotter, 1990)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Management</th>
<th>Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of an agenda</td>
<td>Plan and budget:</td>
<td>Establish direction:</td>
</tr>
<tr>
<td></td>
<td>• establish detailed steps and timetables for achieving needed results</td>
<td>• develop a vision of the future, along with strategies for effecting the</td>
</tr>
<tr>
<td></td>
<td>• allocate resources to achieve results</td>
<td>changes needed to achieve that vision</td>
</tr>
<tr>
<td>Development of a staff</td>
<td>Organise and staff:</td>
<td>Align people:</td>
</tr>
<tr>
<td>network to achieve</td>
<td>• establish structure</td>
<td>• communicate direction for everyone</td>
</tr>
<tr>
<td>agenda</td>
<td>• select and appoint staff</td>
<td>• create teams and coalitions that understand the vision and strategies and</td>
</tr>
<tr>
<td></td>
<td>• delegate responsibility and authority</td>
<td>accept their validity</td>
</tr>
<tr>
<td></td>
<td>• provide policies and procedures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• monitor performance</td>
<td></td>
</tr>
<tr>
<td>Execution</td>
<td>Control and solve problems:</td>
<td>Motivate and inspire:</td>
</tr>
<tr>
<td></td>
<td>• monitor results vs. plan in some detail and identify deviations</td>
<td>• energise staff to overcome major political, bureaucratic and resource</td>
</tr>
<tr>
<td></td>
<td>• plan and organise to solve these problems</td>
<td>barriers to change, by satisfying basic but often unfulfilled human needs</td>
</tr>
<tr>
<td>Outcomes</td>
<td>• produce a degree of predictability and order</td>
<td>• produce change, growth and development</td>
</tr>
<tr>
<td></td>
<td>• produce key results expected by various stakeholders</td>
<td></td>
</tr>
</tbody>
</table>
A crowded field

The literature is already crowded with different terms describing alternative management or leadership styles. Some of them are listed in Table 3, which falls far short of listing all of the possibilities, nor does it account for any differences in either management or leadership which may be caused by variations in culture, age, tenure, performance level or gender. Table 3 also fails to distinguish between fads and approaches that have proved more enduring.

<table>
<thead>
<tr>
<th>Management paradigms</th>
<th>Leadership paradigms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific management</td>
<td>Charismatic leadership</td>
</tr>
<tr>
<td>Bureaucratic</td>
<td>Transformational leadership</td>
</tr>
<tr>
<td>Human relations</td>
<td>Transactional leadership</td>
</tr>
<tr>
<td>Behavioural management</td>
<td>Servant leadership</td>
</tr>
<tr>
<td>Mechanistic</td>
<td>Organismic</td>
</tr>
<tr>
<td>Management by objectives</td>
<td>Laissez-faire leadership</td>
</tr>
<tr>
<td>Socio-technical systems design</td>
<td>Machiavellian leadership</td>
</tr>
<tr>
<td>TQM/quality</td>
<td>Visionary leadership</td>
</tr>
<tr>
<td>Strategic approach</td>
<td>Participative leadership</td>
</tr>
<tr>
<td>Contingency management</td>
<td>Facilitative leadership</td>
</tr>
</tbody>
</table>

Is it any wonder that the literature is full of references to ‘new paradigms’, ‘new perspectives’ and ‘changing paradigms’?

A holistic view

In an attempt to discover what differentiates ‘new’ leadership from ‘old’ management, one of the problems of the leadership vs. management debate is that its focus is wrong. Southworth (1993) has concluded that leadership has for too long been discussed from a limited knowledge base, conceptualised within a single, bureaucratic paradigm. It can also be argued that the leadership-management dichotomy is a false one. While distinctions can be drawn between the complex tasks and skills that characterise leadership and management roles, each should inform and complement the other. This paradigm has dominated leadership theory and practice for a generation, but now we see leadership in a different light. A holistic approach could be more profitable than the atomistic approach. Simmons et al (1997: 21) have found that ‘the concept of a heroic leader who can perform all leadership behaviours is being disputed’. Similarly, the assumption that there is a universally applicable set of management principles has been strongly contested (Locke, 1996). Scott and Jaffe (1991) suggest that an effective leader, particularly of a self-managing work team, must adopt a facilitative role. This means, *inter alia*, being a coach rather than an expert. Perhaps we should stop looking for one person who can be a manager *and* a leader in this brave new world beyond the year 2000.
Another problem is that the definitions of management and leadership in the classical theories are now inadequate descriptions of all that leaders/managers need to do in order to be effective and to create and maintain effective organisational performance. According to Fairholm (1994: 51), past theories are:

... incomplete and unsatisfying and do not help us fully understand organizational behaviour. They omit the power of human beings as factors in the controlling organizational activity dynamics ... And they fail to see the leadership task of creating the conditions within the organization where we can meld human and organizational needs.

In fact, the past models are part of the problem, because they have led us to think of leadership in terms of the individual leader. Administrators are experiencing a broadening of their roles beyond that of the traditional leader/manager to one that requires high level skills in participatory leadership and management. Further, some long-held assumptions about leadership, management, change and professional development are being reassessed. Rather than thinking along the lines of leadership vs. management, it may be more profitable to consider what kind of leadership is needed to manage the state of transition most organisations find themselves in, where it can be found and whether or not either is redundant. Can they both exist in the same organisation without conflict? This leads to the idea of a management or leadership team, or perhaps to a self-managed work group. This concept has benefit, and Wiersema and Bantel (1992) report that firms are more likely to undergo strategic change successfully if managed by a team with demographic diversity. The notion that leadership behaviours can be split between individuals is not new. Bales (1950) and Benne and Sheats (1948) have found that task-oriented and relations-oriented behaviours can be shared between members of a group, and Porter (1987) has found that different styles that complement each other create synergies, because deficiencies in one person can be offset by strengths in another.

Managers as team players

In 1985, Margerison and McCann said:

Teams do not work well by accident. Effective teamwork has to be managed. If you look at any team it is a paradox of effort. At one level it is a number of individuals doing their own tasks. At another level it is a collaborative effort. A classic example is that of the concert orchestra. Each player is accountable for his (sic) individual part, but within a plan set by the composer and rules set by the conductor. The result should be melodic. (p. 63)

Similarly, effective sporting teams in which goals are shared demonstrate what Senge (1990: 235) has referred to as 'alignment': 'in fact alignment is the necessary condition before empowering the individual will empower the team'.

Current management literature abounds with the many advantages of team structures. Blinder (1989: 10) has stated that 'self directed work teams improve productivity, because deep employee involvement builds intense commitment to corporate success'. Instead of contributing to success, members of self-managing
teams are responsible for it. Zenger et al (1994: 23) have suggested that 'the world is changing too quickly and unpredictably for leaders to spend most of their time developing control systems that stabilize the organization'. Similarly, the 1995 Karpin Report on management issues in Australia highlights the need for managers to be 'team players' to be able to communicate effectively, and to involve their workers more than has been done previously. Here, the senior manager is identified as one who sees 'the workforce as a stakeholder in the business', and who is 'working hard on communication and information sharing'.

Stott and Walker (1995: 27) provide a succinct definition of a leadership or management team as:

... a work group or unit with a common purpose through which members develop mutual relationships for the achievement of goals/tasks. Teamwork, then, implies co-operative and coordinated effort by individuals working together in the interests of the common cause. It requires the sharing of talent and leadership, the playing of multiple roles.

This is vastly different from the perspective of, say, the bureaucratic model; a rational model for organisational development and the blossoming of underlying principles of management, to guide people who aim to rise through clearly identified hierarchies to management positions. Characterised by remote, impersonal work relations, insensitivity to individual needs and clear guidelines about how things should be done (particularly as they relate to the 'correct' chain of command), this paradigm is becoming redundant.

**An appropriate environment**

Teams and teamwork do not just happen. They need to be in an environment in which they are nurtured. This stems from the deep values and beliefs held by staff at all levels of the organisation. Peters (1992) describes an environment of trust and exchange, where forums meet on a regular basis to share information and foster learning. Similarly, Stott and Walker (1995) discuss the basic ingredients of openness, trust and participation. However, Stott and Walker (1995) also emphasise the importance of organisational structure and culture for the development of an appropriate environment. They state that: 'the structure of an organization can have significant bearing on team effectiveness. Various structures can either encourage or discourage effective team actions' (p. 417).

In 1996, Covey predicted that Servant Leadership would increase in relevance as the global economy drives corporations to produce more from less and as new technology employs digitisation. In such environments, Covey said the only way to do more for less is through high trust. Covey argues that when trust is high, people give their best performance. He suggested that to encourage a high-trust environment in which people can be empowered, you need:

- trustworthiness - through character, competence and an abundance mentality. There is enough for everyone and there are many alternatives, rather than a limited pie that only a few can share in.
• trust - the glue that holds everything together and is a direct result of trustworthiness. Covey suggests that you make everyone a winner.
• to build win-win agreements by creating shared expectations and understanding.
• to share power, information, recognition and gain through self-directed individuals and teams.
• to align structures and systems with values and principals.
• to lay out the criteria for excellence and provide rewards if it is met.

Another closely related factor in the development of an appropriate environment for teams is that of climate; the enduring, prevailing psychological condition within an organisation. Trust and climate are interlinked in many respects, but Ends and Page (1977: 92) have described its significance thus:

It affects the amount of work workers are willing to do. It affects the amount of initiative and ingenuity they are willing to display. It affects their willingness to commit themselves to high-performance goals. It affects their attitudes toward taking risks. It also affects their attitudes towards supervisors, peers, subordinates, and even themselves.

George (1977: 72) has presented a succinct summary of the climatic issues surrounding successful team operations, including:

... an atmosphere of openness and trust; a willingness of members (of whatever status) to interact on an equal basis; acceptance of change; willingness of subunits to subordinate their interests; individuals who like to work in teams; a good organization development program; a sense of growth.

Trust is central to the leader-follower interaction in organisations, because followers are people who choose to follow leaders. They are not forced to. Several factors have been noted by a variety of writers that condition the process of developing trust. Among them the following appear to be key:

• predictable leader actions and behaviour builds trust (Bennis and Nanus, 1985)
• cooperation is the key to developing trust (Sinitar, 1988)
• a gentle manner is important and congruent actions, in which word and deed convey the same message, are essential (Sinitar, 1988)
• a record of service to followers is critical in defining the leader’s relationship of trust with followers (Greenleaf, 1977)

From the work of Orsburn et al (1990: 23), we may add these essentials: top-level commitment; willingness to take risks and share information, time and resources; commitment to training; operations conducive to team work; union participation where relevant; and access to help.

Summary

Traditionally, leadership has been defined in terms of the institutional leader or manager. These traditional values centred on the manager’s role in interpersonal relations and decision-making and alignment of the individual with the
organisational goals. The literature suggests that the traditional paradigms are simplistic in that they do not recognise that there is no one best managerial/leadership style, or single set of qualities that will make an effective leader. Rather, as Norman and Stace (1998: 9) state, there is 'a rich variety of options influenced by the results sought and the mode of leadership used'.

Fairholm (1994) has identified three seminal ideas that have changed the way we think about managing our complex economic and social organisations. They are:

- leadership based on shared values that build mutual respect, freedom, justice, unity and happiness
- shaping a culture within which the mutual work is done based on mutual, interactive trust
- the power of leaders to get what they want for the group and self out of their association in the organisation.

Fairholm (1994: 147) has described the change as:

... the old values favouring organizational survival and health are giving way to those that prize trusting people, serving them and recognising their rights. Research evidence supports a resurgence of values that eulogise the individual and that empathise equality, trust and mutual commitment.

We need risk takers - not those who are prepared to risk capital, but those who are prepared to take risks by trusting people; to trust in their talent, commitment and capacity to work independently and use different approaches.

**References**


Is your team leadership/management year-2000 compliant?


Clayton's teams: a critical evaluation of the introduction of teams at Paintco Clayton Plant

Richard Gough
School of Management, Victoria University of Technology

Malcolm MacIntosh
The University of Adelaide

This paper is an examination of an attempt to introduce teams into a paint manufacturing company. It utilises a framework developed by Thompson and Marks (1997) to analyse the problems encountered in the introduction and operation of teams. This framework enables a more holistic view of the factors influencing team success or failure than is found in accounts which focus on normative accounts of group behaviour, as favoured by writers such as Katzenbach and Smith (1993).

Since the late 1980s in the United States and Australia, there has been a burgeoning interest in the importance of teams as a vehicle for achieving improved productivity and quality. The reason for this rests on the success of Japanese manufacturers, especially in the automotive industry, in producing goods of low cost but high quality. The work by Womack et al (1990), completed under the auspices of the MIT International Motor Vehicle Program, highlighted the importance of teams in combining work systems and technology. However, their advocacy of lean production (Japanese team-based production systems) as the only competitive model for the future fails to take into account the complexity of teams and the importance of institutional, cultural and labour market contexts in their formation.

Commentators such as Cole (1989) have highlighted the different meanings, management motivations and nature of the outcomes in the United States, Japanese and Swedish cases. In their overview of the research on new approaches to work and technology, Appelbaum and Batt (1994) conclude that a variety of different styles of teams are emerging in the United States, some of which conform more closely to Japanese concepts, while others have more in common with Swedish approaches.

Earlier writers on teams at the Tavistock Institute such as Trist, Emery and Rice, from whose work Swedish-style teams developed, reflect a more critical tradition about work organisation issues and the role of workers in industrial society (Cole, 1989; Eijnatten, 1993). Whilst serving practical ends, the underlying core of the Tavistock ideas on teams, expressed in socio-technical systems theory, rested on a concern over the ways in which modern technologies of production could be reconciled with human values. The socio-technical theorists had an encompassing view of teams which recognised the importance of the social dynamics of the work group, the role of technology, the fact that the primary work group was a sub-system subject to control in a wider system, and the need for a participative approach to implementing successful teams (Rice, 1958).

In a paper reviewing approaches to work organisation, Thompson and Marks (1997) have illustrated the way in which research perspective and interests dictate the
understanding and evaluation of teamworking arrangements. Their approach to understanding team arrangements, encapsulated in Figure 1, returns the discussion of teams to the earlier, more holistic approaches to the understanding of the dynamics of work organisation. As the authors observe, variations in teamworking are embedded in organisational and social contexts, and managers make choices about a range of issues that will influence the operation of teams.

Figure 1 is a reproduction of a diagram from Thompson and Marks (1997) summarising the separate influences on work organisation. As may be observed, they identify three dimensions of team operations about which such decisions are made. The governance dimension refers to the range of decisions made about the authority of teams, their management and their relationship with the larger organisation. The technical dimension refers to choices in production organisation and equipment, which influence the definition of job tasks and working relationships. Finally, the normative dimension refers to the range of social-psychological issues that influence the way in which people work together.

As seen in Figure 1, the authors indicate the ways in which human resource management policies interact with each of these dimensions. By implication, the presence or absence of such supportive policies will shape the degree to which a production team is successfully introduced. Their approach provides a practical framework for guiding the implementation of a team which builds on a longer tradition of research and experimentation with teamworking than is apparent in many contemporary management prescriptions. A review of the experience of Paintco provides an opportunity for demonstrating the utility of the framework as a guide to practice.

Figure 1: Dimensions of team effectiveness (Source: Thompson and Marks, 1997)

Support system 1
organisational decision-making process
Support system 2
training and staff development

Governance

- delegation
- team leadership
- 'citizenship'

Normative

- team players
- cultural cohesion

Flexibility, integration of tasks

Technical

Support system 3
industrial relations
Support system 4
selection, rewards and appraisal
Background

With 45% of the domestic market, Paintco is the largest domestic paint company in Australia and the third largest paint producer in the Asia-Pacific region. In 1987, CHEMCO Australia acquired Paintco and integrated the company into its Consumer Product Division. At the time of its acquisition, Paintco contributed 22% of CHEMCO's Australian earnings.

The paint market is divided into a number of specialised subgroups. There is a basic division between technical and decorative paints, while technical paints, which are more complex to manufacture, include paints for automotive, crash repair and metals coating. Technical paints are customised to the needs of industrial users, whose demand varies with their own product demands. These paints are manufactured at the Paintco Clayton site, which is also the location of the company's research and development facility and its corporate head office. The site includes manufacturing and resin plants, a major warehouse and corporate offices.

The paint industry
Prior to the mid-eighties, when there were changes to the tariff regime for paints and for the products made by Paintco's customers, the company dominated a relatively stable local market. A relatively complacent management style had emerged under the tariff regime, manifesting itself in poor and inefficient work practices. Adversarial industrial relations were the norm, as groups sought to maintain control of the production system. Tariff reductions ushered in a new competitive regime, in which overseas paint manufacturers were able to compete with Paintco for many of its major customers. During this period, there were also qualitative changes in the domestic market, with a decrease in demand for refinish paints and more demanding quality requirements for automotive and other products.

Management structure and strategy
CHEMCO acquired Paintco in 1987, bringing considerable technical and management skills to the issues facing the company. CHEMCO was led by a Canadian general manager, who was active in formulating the business council's industrial relations policy. CHEMCO (Mealer, 1992, 1997) adopted a total quality approach to management as a means of re-establishing competitiveness in the new market environment (Knobelman, 1993; Langfield-Smith et al, 1997). The assertive approach of the CHEMCO management also ensured that decentralisation of employee relations and a more individualist relationship with employees was on the management agenda.

From 1986, the company was divided into a number of operating groups and corporate units responsible for issues such as finance, personnel and planning. The paint-operating group had two line managers: one responsible for decorative paints and another for industrial paints. It also had three staff managers for finance, personnel and planning (Rimmer and Underhill, 1992). The organisational structure is set out in the following diagram.
The lines of reporting were complicated, with the national employee relations manager reporting to the corporate-level personnel unit and also to the general manager in charge of the paint-operating group. The site personnel manager, also responsible for other Victorian sites, was responsible to staff and line managers. This led to line managers dealing with either staff or senior line managers, depending upon their preference. The problem was exacerbated by there being five employee relations managers in five years (Rimmer and Underhill, 1992). The co-location of corporate and plant offices at Gayton further aggravated the potential for overlapping responsibilities. As a consequence of these organisational arrangements, the lines of authority and the identification of management priorities were frequently confused. This was exacerbated by a high level of management staff turnover, ensuring that many management initiatives were often not pursued consistently over time.

The new corporate management policies at CHEMCO were strongly influenced by the observations of senior management in benchmarking tours, which led them to visit Federal Express in the United States of America and Scandinavian Airlines in Sweden. Both of these companies were noted for human resource management practices, which shifted responsibility for quality outcomes to operational employees. During 1989, the Paintco General Manager and the Operations Manager from Clayton visited Japan and inspected two major Japanese paint companies, Roc
and Kansei. They later observed that the Kansei plant did not look much different to Clayton except that it had an effective system of quality circles. However, the paints production system at Roc appeared to be laid out quite differently to that of Clayton, and the Operations Manager observed that:

... it looked quite simple, and yet they were making far more, far higher volumes than we were making. There was no stock anywhere, no raw materials, there were no people ... and yet they did these enormous volumes.

In comparison, the Clayton production system seemed quite complex. The Japanese plant produced 24,000 million litres a year versus 15,300 million at Gayton. It manufactured only 400 products compared to 750, took only 11 hours versus 108 man-hours/batch, and only reworked 0.04 batches compared with 2.0 at Clayton (Knobelman, 1993). It was also obvious that the level of capital intensity was much higher at Roc, though this was not seen to be a critical factor in the central message brought back from these visits; work arrangements were the significant element in Roc's success.

Due in part to language problems, neither manager clearly understood why Roc were getting the results. The general manager noted that:

... it took two years to discover the manufacturing techniques used to achieve these levels of productivity; the methodology used has become known as cellular manufacturing.

The result of this process was a shift in focus to customer service and quality and a new approach to industrial relations and employees. Major elements of the new employee relations strategy included the creation of uniform benefits with regard to share ownership, a single superannuation fund and similar reward systems to enhance employee commitment. These benefits were complemented by a push to develop employee skills and to give them responsibility so that they could use their skills more effectively.

**A threshold issue - industrial relations**

The practical underpinning of this strategy was an attempt to move away from industry bargaining to enterprise agreements with one union. Such an approach was in line with the Business Council of Australia's (1989) position, published at the time in *Enterprise-Based Bargaining Units: a Better Way of Working*.

Industrial relations at Paintco had been reactive during the years of protected markets. The multiplicity of awards and agreements, reflecting a multi-union bargaining situation, were highly prescriptive. They provided detailed and narrowly focused job definitions, strict demarcation of jobs within the factory and between factory and warehouse, and extensive benefits in the form of overtime and shift penalties. These provisions created an incentive for workers in the plant to slow work during the day, so as to create opportunities for overtime. Poor quality was similarly rewarded with penalty pay.

A further outcome of the rigid job definitions in awards and agreements was experienced as excessive staffing. The underlying problem, however, was that the
Clayton's teams

workforce was inflexible; each had very defined tasks to undertake and no skills outside those tasks. A great deal of flexibility was needed to meet the demands of a complex production schedule, in which a great number of different end products were to be produced in different quantities. The company achieved these flexible job definitions and career structures in the new agreement that emerged in October 1990.

Management responsibility for industrial matters was confused and the roles of corporate and plant managers overlapped and conflicted. Senior managers paid little or no attention to employee relations issues. As a consequence, a great number of local and informal site agreements were negotiated to deal with critical issues such as discipline, dismissals, safety, transfers and the use of contract labour, and with wider issues such as the 35-hour week (Rimmer and Underhill, 1992). The result of this situation was weak and reactive management of industrial relations, with little ability by management to match the effectiveness of experienced union delegates, especially those from the National Union of Workers. The several unions represented used the Clayton site as a benchmark for pattern bargaining in the wider chemical and processing industries, and were thus very protective of the conditions won at the Clayton site. The unions themselves were in conflict over membership across Paintco, and this inter-union rivalry frequently spilled over into work stoppages.

A change in orientation of industrial relations began in 1988 with the appointment of a new national industrial relations manager and the new General Manager at the Clayton plant. The new executives arrived at a time of considerable change in the structure of Australian industrial relations towards a system of 'managed decentralism', which preceded the more recent move to enterprise-based bargaining systems.

In 1990, the new management initiated a process of industry negotiation, which was to prove frustrating and time-consuming. The failure of industry negotiations led to a site agreement and single union representation. The process was accompanied by industrial stoppages and legal wrangles. However, the site agreement opened up opportunities for multi-skilling, and eventually for a wholly different form of work organisation on the site.

The pilot team

In their efforts to improve production performance, the company had placed considerable faith in the more flexible job classifications emerging from the award system. However, the functional organisation of production work continued to limit flexibility. After the visit to the Roc plant in Japan late in 1989, the Plant Manager was enthused with the potential of teamworking arrangements for improving efficiency and product quality through the greater utilisation of employee skills. As indicated above, his visit had not allowed any systematic evaluation of the causes of Roc's success, but he was convinced that Paintco should move down the same path, particularly in removing functional barriers and adopting teamworking practices.

The opportunity to break down functional barriers in work organisation emerged early in 1990 with the completion of plans for a new paint plant on the site. With the assistance of Price Waterhouse, the concept of team-based cellular manufacturing was explored. A trial scheme for cellular production was approved in September 1991, and within a week of the decision, a Pilot Scheme was in place. In these three days, it was decided what products would be made, what equipment was available
for dedication to this particular team and which people would be selected for the task. The manager charged with responsibility for the project later commented that ‘at the beginning no-one really knew what we’d do with the results when we started’. This perception was reinforced by the development manager, who noted that the attitudes of the General Manager and his project manager appeared to be ‘we’ll just practice and see how it turns out’.

The cell consisted of ten people who were chosen by the plant manager on the basis of their apparent ability to cooperate with one another and for ‘open mindedness’. Personality characteristics were regarded as more important in the pilot than technical skills. The cell members brought a range of experience to the plant, ranging from three days to thirty years, but were given no special training for the pilot.

The pilot cell was responsible for the production of red tinters, a paint-base used in a range of other products, and supplied directly to automotive manufacturers and others who mixed their own paints. This was a product critical to Paintco’s reputation, so the cell was given considerable assistance and managerial support in getting the required equipment. They were also given preferential treatment for maintenance work. This created considerable hostility amongst other employees, who argued that the pilot cell was operating in an unreal environment.

The pilot proved to be very successful; the average batch cycle-time was reduced from 155 to about 56 hours, while worker-hours per batch fell from an average of 69 hours to 32. The improved workflow was achieved largely through better planning of machine utilisation. This was assisted by the greater degree of multi-skilling taking place. The fall in worker hours represented an elimination of considerable slack in labour utilisation, although this figure was distorted by the failure to count overtime in the pilot cell figures.

The pilot also yielded important improvements in quality, demonstrating one of the anticipated CHEMCO benefits of teamworking arrangements - their acceptance of responsibility for production process problems. One area of quality improvement involved attempts to break down the barriers between production workers and the chemists who designed the paint composition and quantities for mixing. The functional separation of chemists in the past had led to production workers developing ‘tacit knowledge’ about how to adjust the mixing processes during production, to achieve the desired outcomes. By making one chemist a mentor for the cell, the ability of the team and the chemist to focus on problem-solving activities was enhanced.

**Extending the pilot scheme**

The pilot program concluded after seven weeks and actions were immediately taken to proceed to a full implementation of teamworking at Gayton. Not unexpectedly, this haste led to a number of problems in the implementation process, involving attention to training, production equipment and systems.

Plans for the full implementation of teams had been evaluated by the development engineer, who suggested that four issues needed attention to ensure its success: training, additional equipment to ensure that each cell could operate without sharing resources, changed arrangements for maintenance and better scheduling of the complex range of products. An integrated computer scheduling system was seen as
Clayton's teams

the answer to this last problem. However, the commitment of the senior managers to an immediate extension of the pilot effectively excluded any planning for the new arrangements. The technological issues in particular would have needed a relatively extensive lead time, whereas they were introduced progressively over a period of two years. Training effort for teamwork was not pursued, although there were extensive training modules developed. Their use, however, was dependent on employee demand. One manager observed that:

... it was a very quick change, it was a very dictatorial change ... we were not given a lot of time to do a lot of these things [to make the transition smooth] ...we wanted to do a bit more of an education process about how to work in teams. We also wanted to try and put in a bit more [training for] interpersonal relationship skills ... But the teams had to struggle.

Management style

Behind the implementation process were a range of personality and organisational issues, which manifested themselves as confusion and inconsistency between managers. The lack of careful planning and the speed of the changes also reduced respect for management and inhibited the effective development of the teams.

The implementation was driven with some energy by the plant manager, whose style became an important factor in the subsequent experience with teams. While the plant manager was widely seen as being innovative, dynamic and good at communicating, his managerial style had severe repercussions on the implementation of teams. He was someone who according to a senior manager:

... was an optimist who believed anything could be achieved ... he did not want to listen to facts or logic, he just said 'look, we have to give it a go'.

Another manager indicated that he:

was some-one who said 'we've made this change, now we'll go and make the next one, now we'll go and make another' and would never go back and make sure that what you have done is still in place - is still operating.

The teams were formed at the rate of one a month from February 1992 until July, when 60% of the factory was working in teams. At that time, all workers were changed over to teams. Where the plant manager sought full team introduction over six months, other managers believed that the changes ought to take 2-3 years, so as to give greater attention to cultural change in the workplace.

His approach was further illustrated by the failure to consistently explain the underlying need for change. He assumed that this logic had been explained to the workforce in the site agreement negotiations. Failure to recognise the high degree of instrumental support for that agreement was a blind spot in the implementation process, as it deflected all managers from the need to explain the underlying logic of the change objectives.
It is also evident from interviews with managers and production workers that the plant manager's style was only part of the problem, as there were considerable differences between managers themselves over the team implementation process. Several managers attempted to mediate the plant manager's pace and direction of change. For example, one team leader noted that the personnel manager would:

... give you a guideline of what he thought would be his action and then leave it to you, and he would say if you try it and it's not for you, come back and we will try something else.

Several workers and team leaders noted that he listened to employee's comments and that he was considered an excellent manager. Commenting on the plant manager's more coercive style, one of the team leaders noted that in relation to the personnel manager:

I do not think he (the plant manager) would have done it without him; I am convinced he would not have succeeded.

A comment by one of the employees expressed a widespread feeling of betrayal from the contradictory positions within management.

... the operations manager would say this is what is going to happen ... you can take that to the bank. Then a couple of weeks later something completely different happens ... you get to a stage where the general mistrust and 'them' and 'us' attitude will never change ... they have to be completely honest and up-front and straight down the line (to get trust).

Other senior managers were aware of the tensions between the plant manager and the personnel manager. The critical result was that employees received mixed messages, which were not conducive of eliciting the empowerment and resultant commitment sought by management.

Regular changes in management provided a focus for skepticism about management motives. One team leader suggested of the general manager that:

I think he came and did what he had to do and got out, and now this mob (current management) are here to do whatever they are here to do, and they are going to do it and then they are going to get out.

Another employee, who was keen on the changes, noted that

CHEMCO seems to rotate its top management every two years. So we always get new management, and we just had a new lot come in twelve months ago ... I think they use the stick more than we are used to.

The speed of the change was seen by some as an abrogation of responsibility, rather than decisive leadership. The operations manager later reflected that:

... the reality was that we had missed [the point] that before you can empower, you have to enable, you have to train.
Another manager said that:

I think that in a lot of respects we abrogated responsibility rather than empowering. ... a lot of things that we did we did not understand ourselves. I don't believe that we should have forced them down to the factory level, as if to say we don't know how to solve it, you work it out for yourselves.

**The outcomes**

The original intention of management with the introduction of cells was to develop self-managed teams, which would empower employees to improve quality and customer service. This concept of empowerment did not seem to have been clearly sketched out by management. However, the basic elements involved a concept of cells that would select their own members, decide jointly about issues such as work allocation and training, involve cell members in administrative tasks such as planning work flows, and allow the cell involvement in setting quality measures and output targets.

As it transpired, the management approach to the implementation of teams provided little support or guidance. In general, employees expressed considerable frustration and confusion over the experience. One operator observed:

One day we were working normally, and the next they came up and said to us, 'we just changed the structure and we are going to go onto cellular in the factory'... it's been going for two years and they have not got their act together.

Another said that:

When we went into teams we were basically on our own. We were told that we would be running the teams, and we were basically left to our own resources to how to actually organise the teams ourselves.

A result of this confusion in direction was that personality conflicts within the teams emerged around differing approaches to teamworking. One worker noted that:

They [the management] said 'you have to stay in your cell, it doesn't matter if you do not like one another or what, you have got to work'. So it did leave a bit of friction until you came up with a solution and sort of worked things out.

Interviews with approximately 30% of team members over two years suggested that the company has not so much achieved an effective teamworking system as one in which a range of different work systems has emerged in more focused production units. These production cells each serve different markets, one of them being wholly oriented to supplying products to the other cells, and the other linked to external customers. The work loads and processes differ in each situation, and in the absence of a coherent philosophy for integrating production planning, work group relationships and technical aspects of production, many cells have not moved far
from traditional functional task performance. They also exhibit low levels of group cohesiveness. These outcomes are summarised in Table 1, which is based on the interview results.

**Table 1: Team members' perceptions of team operations and effectiveness**

<table>
<thead>
<tr>
<th></th>
<th>Team A</th>
<th>Team B</th>
<th>Team C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of team members</td>
<td>10</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Production demands</td>
<td>made tints for input to other processes</td>
<td>encompassed whole process of paint production for JIT delivery, leading to continuous pressure</td>
<td>high-demand overtime two-shift operation</td>
</tr>
<tr>
<td></td>
<td>simple processes with skilled checkers, steady flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team leader style</td>
<td>systematic coach weekly meetings</td>
<td>evolved over two years from autocratic to consultative</td>
<td>poor leadership, commanding little respect and giving little support to team members</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude to training</td>
<td>voluntary</td>
<td>voluntary, but difficult to access via work pressures</td>
<td>voluntary, but also difficult to gain access to</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skill level</td>
<td>advanced skills demands limited to a few</td>
<td>half had full range of skills</td>
<td>relatively advanced skills required by every operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team cohesion</td>
<td>high</td>
<td>continuing attachment to individual tasks</td>
<td>very low</td>
</tr>
</tbody>
</table>

Source: based on interviews conducted 1994-96
Evaluation of the implementation of teams at Paintco

Upon examination of the support systems for teams, it is apparent that the company failed to attend to the supporting human resource actions.

As indicated above, the management decision-making structure was beset by inconsistency, contradictory styles and confused responsibilities. Moreover, the removal of a level of supervision left newly appointed team leaders with little support or guidance. The plant manager’s rhetoric concerning empowerment was betrayed by his failure to recognise that the speed and style of implementation represented a continuation of older, more autocratic management traditions.

While the new industrial relations arrangements embodied in the Site Agreement provided a basis for multi-skilling, it was also clear that the plant manager failed to realise the cost of long negotiations over the Site Agreement on trust within the plant. Moreover, his assumption that these negotiations were an adequate means of communicating the objectives and rationale for change were evidently poorly based. There was no attempt to develop reward systems or even systematic selection processes to support teams. Although the Site Agreement provided for skills-based career paths, there was no attempt to annualise pay or to reduce the problem of excessive overtime, though subsequently in 1997; annualised salaries were introduced. As a result, much of the reward was based on a continuing pattern of time-based pay. A more positive effort was needed for the skills-based career paths to be structured for use as a tool for change. The company was slow to undertake any review of skill needs, and those that were put in place were poorly linked to training. The relatively slow introduction of the essential technical underpinnings of cellular operation, indicated clearly by the production engineer at the end of the pilot, further weakened the ability of the work groups to develop new ways of working.

One of the most serious deficiencies in this case was the approach taken to training. Training decisions were ultimately left to team leaders (in the interests of autonomy). However, faced with production, pressures, cynicism and the preference of many employees for established ways of working, training was not pursued systematically or consistently. Moreover, the lingering elements of an adversarial industrial relations tradition reinforced informal job demarcations and protectionist job attitudes.

As Table 1 indicates, the results of employee interviews suggest that only one of the Teams could be properly considered to have adopted new ways of working and achieved cohesiveness consistent with mutual support and recognition of a common task. Other teams appear to have departed less from more traditional ways of working. Team members appear to explain the differences between their experience of teamworking by differences in the style and ability of the team leader and in the production processes and demands experienced by each team. However, it is clear from the overall analysis of this case that the failures can be traced to the failures in management structure and process and to a failure to adopt a systematic approach to critical support policies.
Conclusions

This case illustrates the value of examining team arrangements in the more holistic manner advocated by Thompson and Marks (1997). It is apparent that the success or failure of the teams cannot be understood merely in terms of their interpersonal dynamics. The introduction of teams at Clayton was complicated by poor systems of governance and slowness in responding to the technical requirements of the new ways of working. Without attention to either of these dimensions of the organisation, attempts to develop effective teamworking arrangements were unlikely. Essentially, operators and their team leaders were faced by confused and confusing prescriptions from their managers, continued to work with equipment more appropriate to functional-based production arrangements, were given little support and had little experience in cooperative working beyond unity over industrial issues.

The case illustrates the utility of a holistic approach to the understanding of team development. Ironically, this was one of the elements of the original concepts advanced by members of the Tavistock Institute in the 1950's.

References


Training
Self-managing work teams: training for effective participation

Hilary Martin and Linda Chaousis
Torrens Valley Institute of TAFE, South Australia

As a result of recent research into the training required for effective participation in self-managing work teams, a learning guide has been written for team members at an institute of TAFE in South Australia, to assist in the development and enhancement of skills and knowledge. This paper provides a comprehensive description of self-management, briefly describes the research that was undertaken and outlines the training that was found to be required. It then describes the process used in the development of the learning guide and an overview of its content. A comprehensive bibliography on self-managing teams is added.

As a result of the recent trend towards the introduction of self-management in organisations, the aim of this study was to explore whether or not training and development for involved staff prior to the introduction of self-management would be beneficial, and if so, the nature of the training and development required. The impetus for the study derived from the author's own involvement in self-managed work teams for a period of four years, both as a team member and as a manager.

Therefore, the broad aims of this research were to explore the concept of self-management, to question the value of training and development in its implementation and to analyse the variables of training and development, to identify those areas perceived as being of greatest benefit or value.

The study consisted of a detailed review of the literature to provide an in-depth description of self-management, including its historical development, main characteristics and identified implementation strategies. Such strategies included the development of teams as an internal operating structure and recommended areas of training and development.

A survey was then conducted (Survey 1) which asked practising managers experienced in the implementation of self-management for their perceptions of the training and development required for effective membership of self-managing work teams. This information was compared with the recommendations from the literature. Where there was consensus, the identified areas of training and development were presented to members of self-managed teams, the target group of staff. These staff were asked to prioritise the areas in terms of perceived benefit before the implementation of self-management (Survey 2).

All of the people who participated in the surveys were staff members of the Torrens Valley Institute, a state government organisation. Survey 1 was completed by staff who were currently managing self-managing teams, and Survey 2 by staff who were members of the self-managing teams and fulfilled a variety of positions, including lecturers, lecturers' assistants, administrative services officers and physical resources officers. The Torrens Valley Institute was selected as a case study because of its recent implementation of self-management and the fact that it was undertaking an
internal review, which provided an opportunity for this study to occur. Additionally, individual staff of the institute had been regularly invited by other government departments and some non-government agencies to present information about the implementation process. This had proved difficult because of the ad hoc approach used at the institute.

Staff from the original Tea Tree Gully College had moved quite quickly to self-management, and had very little opportunity to participate in specific, relevant training and development either before or after they became self-managing. There were a number of reasons for this: an ad hoc approach to the implementation of self-management; a shortage of ‘time’ available for staff training and development; and a lack of clarity about models, operations and necessary supports for self-management. Regarded as advocates of immediate ‘overnight’ implementation strategies, the American authors Semler (1993) and Peters (1992) were also influential.

The implementation process at Tea Tree Gully College would appear to be contrary to the purview of a workplace which is an educational institution and which prides itself on its excellent quality and quantity of staff development opportunities. One explanation for this contradiction, as proposed by the Director of the Institute, is that the only way to learn about self-management is to ‘do it’. Indeed, this is a theoretical position which recurs in the literature, where there are many anecdotal examples of worksites which have become self-managing ‘overnight’ through the vision and foresight of a single charismatic leader (Peters, 1992: 74; Semler, 1993: 49).

In contrast to the theories of Semler (1993) and Peters (1992), a number of other writers have advocated a more gradual approach, including training and development for staff prior to the implementation of self-management (for example, Katzenbach and Smith, 1993a; Orsburn et al, 1990; Zenger et al, 1994). This study sought to illuminate this field by investigating the perceptions of practising managers and staff who had been subjected to a change from traditional to self-managed structures. All were members of self-managing work teams at the Torrens Valley Institute. They were considered to be experienced managers who could make valuable observations about the training and staff development that might or might not have been needed before the implementation of self-management. They were also given the opportunity to indicate the areas of training and development (if any) they considered the most useful.

The research occurred in 5 stages:

**Stage 1**
An extensive review of the literature relating to self-management, particularly focusing on the variables that contribute to its efficiency and on details related to one of these variables: training and development.

**Stage 2**
Information was drawn from a qualitative questionnaire given to the 12 managers of the Torrens Valley Institute. The questionnaire explored the perceptions of the managers about the training and development that would have been useful before the implementation of self-management.
Stage 3
These identified areas of training and development were compared with areas identified from the literature. At this stage, an assistant was engaged in the project to share in the analysis, with a view to reducing bias or influence from prior knowledge in the comparison.

Stage 4
A quantitative questionnaire was administered to members of self-managing teams, asking them to prioritise the areas of training and development considered important precursors to the implementation of self-management, as previously identified from the literature and perceptions of managers.

Stage 5
The responses were analysed and conclusions drawn.

Results have provided useful information for the staff of Torrens Valley Institute and have been incorporated into this study. Significant outcomes include:

- extending the self-management concept to the Gilles Plains campus
- the induction of new staff to the Institute
- ongoing training and development of existing staff who may already be members of self-managing teams

It has also provided valuable information to share with staff of other Institutes, government departments and non-government agencies who have shown interest in the implementation of self-management and who have called upon staff of Torrens Valley for presentations and workshops.

Self-managing work teams

As described above, while maintaining their many advantages, team structures can vary considerably. Of particular interest in this study is the team which has strong elements of self-management.

Hicks and Bone (1990: 2) have defined a self-managing work team as a ‘work group that operates with varying degrees of autonomy and without a visible manager’. The group assumes some management responsibilities, such as planning, organising, directing and monitoring, as well as performing its specific jobs. These tasks are shared between members of the work team. In a fully functioning self-managing team, control comes from within the group, rather than from outside. Orsburn et al (1990: 8) have defined the self-managing team in terms of its responsibility as: ‘... a highly trained group of employees, from 6-18 on average, fully responsible for turning out a well-defined segment of finished work’.

The following diagram from Hicks and Bone (1990: 4) clearly illustrates the degree of autonomy commensurate with self-management and the way in which it differs from other forms of participative management. The diagram illustrates that teams may operate on a self-management continuum, with some teams more autonomous than others.
Teamworking: some international perspectives

Figure 1: The management continuum

Self-management starts here

<table>
<thead>
<tr>
<th>Traditional directive management</th>
<th>Participative management</th>
<th>Traditional structure with absentee manager</th>
<th>Less traditional structure, manager as facilitator/integrator to several groups</th>
<th>Self-managing teams with skip-level reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Decisions from the top carried out by team members</td>
<td>• Team involved in selected decision-making and solving problems</td>
<td>• Team contracts for certain management responsibilities</td>
<td>• Team contracts for certain management responsibilities</td>
<td>• Team contracts for increasing responsibility as group matures</td>
</tr>
<tr>
<td>• Individuals have some input</td>
<td>• No real authority or autonomy separate from the manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Team has no major role in decision-making and solving problems</td>
<td></td>
<td></td>
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</tbody>
</table>

Source: Hicks and Bone (1990: 4)

Because of the high degree of autonomy and the resultant need for regular interaction between team members, Prentice and Rabey (1994: 104) have suggested that slightly smaller groups in comparison to other types of teams might be optimal (e.g. 5-12 members). Like Orsburn et al (1990), they have also emphasised that members need to be competent at their jobs. As workers become increasingly competent at their particular tasks, job rotation becomes quite common within self-managing teams, often combined with a rotating leadership position.

The advantages of self-managed teams are in all respects similar to those pertaining to teams in general. However, the difference becomes one of degree. In teamwork, members are able to feel a sense of belonging and a part of the decision-making process. In self-management, members are involved and are the decision-makers.

Blinder (1989: 10) has stated that 'self-directed work teams improve productivity, because deep employee involvement builds intense commitment to corporate success'. Instead of contributing to success, members of self-managing teams are responsible for it. Other advantages typically cited include increased productivity, streamlining, flexibility, improved quality, greater commitment and increased customer satisfaction (Orsburn et al, 1990: 15). Slightly less tangible benefits are cited
by Hicks and Bone (1990: 5) in their statement that members of self-managing teams require less 'hand-holding' when they have more control of their jobs. Members have also reported greater motivation, increased self worth and a greater pride in their work. Self-management is also identified as a means of self-expression for today's workers, providing psychological enrichment, less frustration and greater opportunity for creativity. As Lundy (1992: 99) has stated, 'Good people need to be challenged. At the end of the day they want to feel good about having done something worthwhile', and that stress levels are actually reduced through involvement.

While self-managing teams do indeed undertake many of the management responsibilities within the organisation, they still require a degree of management. They are not, as Zenger et al (1994: 13) has pointed out, unmanaged, so much as differently managed. The manager gradually moves away from day-to-day decision making until the team has adequately developed the necessary skills to do this, and then keeps in touch via regular meetings, spending time instead on strategic planning and providing the team with resources, information and guidance. Managers are thus able to 'download' time-consuming operational responsibilities (Orsburn et al, 1990: 12) and focus on profit and improvement-oriented activity. Lundy (1992: 99) has described the process as one of delegation and considers that not only does it free managers for other tasks, but also strengthens teams and improves morale.

The essential factors in establishing a team have been identified. Variables include the establishment of an appropriate environment, the development of a vision, the role of the manager, the stages in the formation of teams and the importance of evaluation. The characteristics of effective teams have also been examined. The variable factors which have emerged as being of major importance in the implementation of self-managing work teams include: group membership, size, roles fulfilled within the team, attitudes and values of team members, operational procedures used by the team members and the training and development provided.

A major factor identified for the effectiveness of teams, particularly self-managing teams, is the training and development experienced by team members. This has been examined in some detail, with nine major areas of training and development being identified: communication and interpersonal skills, technical skills, administrative skills, creative and critical thinking, systems thinking, change, special topics, self-motivation and self-accountability and an understanding of the concept of self-management and its implementation. Another area which has received attention is the importance of creating an appropriate learning environment within an organisation, in order to foster and encourage relevant and timely training and development.

As a result of the research on self-managing teams, a project was established within the institute to address the need for the development of new and existing staff. This project is described below.
Context

Most people in the workforce today are facing increasing pressures on their time, as resources and budgets are shrinking without a corresponding decrease in the amount of productivity expected. Those in environments where decision making has been devolved often feel they have been more bludgeoned than blessed by self-managing teams, and are looking for development that will help them address the real issues and get beyond the hype. But there is little time to be ‘off-line’ for training, when the workload is increasing at what seems an exponential rate.

Many have experienced the ‘one-week wonder’ - programs that are fun, entertaining and inspiring - until they get back to work and find it hard to bring all the dazzle and inspiration back to ‘reality’. Ask these people a month later how the training program has impacted on their productivity, and most will say: ‘It was a fun program, great speaker, good lunch, but er, um, well, it hasn’t made much difference at work’. Often participants receive a Certificate of Attendance that is only recognised by the company providing the program, meaning that their participation has not helped them in getting a formal qualification.

In today’s competitive environment, a formal qualification is becoming more and more important, particularly in the area of management. Even people who have been excelling in management positions for a number of years find that their experience is not enough; the formal qualification is now a prerequisite for promotion or being hired into many positions.

A successful solution

The Self-Managing Teams - Hands on Development was developed using a model that has worked successfully in other programs developed by the author. Feedback from participants and their managers has been superlative. The key features of this development model are:

- Workshops targeted to issues the participants are facing, contextualising the assessment criteria around these specific relevant issues
- Topics and assessments based on nationally accredited criteria
- Work-based assessment activities to establish or improve existing practices, systems and procedures
- Mentoring support from the program facilitator throughout the program, to assist in the transfer of principles and practices discussed in the program to the workplace

Benefits to the participants are:

- Award of a nationally recognised formal qualification upon completion
- Refined or established systems, procedures and practices in the workplace, which further improve the productivity of participants - and usually relieve some pressure!
- Ongoing mentoring support via fax, phone, email or personal meeting
- An enhanced professional network. Groups from the same organisation find that cross-organisational communication improves as a result of the discussions in the
workshops. Groups where several organisations are represented find that a very valuable network of contacts and support is established during the time of the program.

This model has succeeded in a diverse range of industries, which include communications, transport, education and medicine. Feedback from participants and their managers regularly includes examples of improved personal competence or improved relationships and systems as a result of the work-based assessments. These improvements usually continue on after the program has been completed, because the mechanisms, habits and practices have been put into place to continue the improvement cycle.

The program focuses on hands-on experience, rather than acquiring further theoretical knowledge. It consists of half-day workshops and a workbook that provides departure points for discussion. Participants are forced into their workplaces to undertake most of the activities, sourcing resources (people and materials) which they would have to source to undertake the task in their workplace anyway. This helps to form a resource base that will become part of the working network of participants, ensuring that positive changes made as a result of participation in the program continue after its completion.

The process for developing the program

The brief for the development of Self-Managing Teams - Hands On Development was to develop a program that would assist in the induction of staff members new to self-management and also serve as a refresher course for teams that have been operating in self-managed environments for a while.

To help contextualise the program, stakeholders were invited to provide input in the following ways:

- managers were given a survey asking them to raise the issues most pressing for them as managers in a self-managed environment
- staff members were invited to provide input in any form that they desired

The results of the feedback reflected a diverse (and at times contradictory) understanding of what was meant by the term self-managing teams, particularly as it related to the role of the manager. The workbook was developed using case studies and activities that targeted the identified problem areas. The topics and work-based activities were written to the assessment criteria for the element entitled ‘Participate in, lead and facilitate teams in the new Front line Management Initiative (FMI) competencies’, which were a result of the Karpin Report. FMI is now considered the national accreditation standard for managers. Participants who successfully complete the work-based assessments receive credit toward the FMI qualification or toward a TAFE management qualification at level AQF 4, both of which are nationally recognised and can ultimately articulate into university courses.

The program was designed to be versatile and successfully adapt to many circumstances without compromising the competencies. The workbook is structured in a manner that provides flexibility for people to undertake the program as a group,
individually, with or without workshops and with or without formal assessment, to accommodate those who are or are not seeking a formal qualification.

**Workbook topics**

There are four topics in the workbook:

**Topic 1** The different shapes of self-managed teams

This sets the stage for the rest of the module and ensures there is common agreement about what it does and does not mean to be a self-managed team. It also emphasises that not all self-managed teams look alike and therefore each team should appreciate and identify its own identity. There is also a discussion about the fact that being a self-managed team does not mean that no one can tell you what to do.

**Topic 2** Team relationships

This addresses key relationship issues like trust, team roles, conflict resolution and power. There is a discussion of the (at times overlooked) fact that relationships in teams are built so teams can meet performance goals, rather than simply for the pure enjoyment of the team members.

**Topic 3** The 'M' word: management of the team - who, what, how and how much?

With case studies and discussion, the role of the manager within the team is discussed. Tips on how to determine how much input a manager should have in team decisions is discussed.

**Topic 4** Making it work

Stages of team development and the rapid and ongoing changes they have to deal with are addressed through activities and discussion.

Within each topic, there is scope for teams to branch off into issues they are currently dealing with, using the topics and assessment criteria as a foundation for discussion.

**Pilot**

The initial pilot group has been very successful. This pilot team had been fractured by a conflict, resulting in stress leave and one member lodging a formal grievance. Many team members were traumatised by this situation, which lingered on for more than a year. This has proven to be an excellent test case, as it is probably representative of the most difficult situation the program will be applied to. The team was very reluctant to participate in the first week of the program, assuming it was going to be another 'hype' whitewash, never really getting below the surface. Most were emotionally drained and had little reserve to discuss team issues, which were still very raw. Participation on Topic 1 was polite, but reserved. By the end of Topic 2, because of the ability to tailor the sessions to the team's specific needs, most team members were fully involved and were asking for the next session to be as soon as possible. After the second session, there was a significant improvement in team cohesion.
Conclusion

People want honest, to-the-point development that is going to make a difference to the way they work. The model used in this program can successfully achieve this, while providing great flexibility for the methodology, target topics and group combinations selected for any given program.

Based on the response the Innovative Management Program has received, this model of management development is a perfect match for the current workplace situation and requirements of managers and teams, who have the opportunity to further advance their formal qualifications while being mentored through workplace improvements, with minimal time away from the job.

References


Self-managing work teams


Training, teamworking and new management practices

Andy Smith
Charles Sturt University, New South Wales

This paper reports the preliminary results from a research project funded by the National Research and Evaluation Committee examining the impact of the adoption of new management practices (NMPs), particularly teamworking, on the provision of training in Australian enterprises. The research involves a survey of 2,000 enterprises and follow-up interviews with 100 enterprises. The aim of this research is to build a model of the way in which different NMPs affect the demand for training in enterprises and the way in which training is used to support the implementation of teamworking and other NMPs.

Since the early 1980s, Australian enterprises have become exposed to increasing levels of international and domestic competition. In the context of the globalisation of markets and the free availability of technology, enterprises have been compelled to seek improvements in performance from the better utilisation of their human resources. As a result, Australian enterprises, together with their counterparts in other parts of the developed world, have implemented the NMPs with enthusiasm in a bid to harness the knowledge and creativity of their workforces (Australian Bureau of Statistics, 1996).

Overseas research, particularly in the United States of America, has shown that the adoption of NMPs is gradually becoming more widespread. It has been estimated that by the early 1990s, over one third of American establishments had implemented at least two NMPs (such as Total Quality Management (TQM), teamworking etc.) to the extent that they impacted on over 50% of the workforce (Applebaum and Batt, 1994; Osterman, 1994). Moreover, it appears that these changes are frequently accompanied by an increase in the extent of training provided in enterprises, and by a switch from conventional, technical training to training that emphasises the behavioural skills of employees, such as interpersonal and problem-solving skills (Cappelli and Rogovsky, 1994; Osterman, 1995). There has been little complementary research conducted into the extent and implications of organisational change in Australia. However, data from an Australian Workplace Industrial Relations Survey show that over half of all Australian workplaces underwent significant structural change in 1995. This figure rises to over three-quarters for larger workplaces (Morehead et al, 1997). Figures from the Australian Bureau of Statistics appear to indicate that 20-30% of Australian enterprises adopted TQM and/or just-in-time methods in 1993 (Department of Industry, Science and Technology, 1996). This scale of adoption was confirmed by the Industry Training Studies survey of training practices in 1995 (Hayton et al, 1996). The case study component of that research also showed that training requirements were shifting towards general behavioural skills and away from traditional technical skills.

Each of these NMPs implies a different approach to the management of the enterprise. However, a common thread running through these programs of organisational change is the extensive use of teamwork to motivate employees and gain increased flexibility, by devolving responsibility for decision making to lower
levels in organisations. The level of responsibility and autonomy devolved to teams varies significantly, and as recent research has shown (Dyer and Reeves, 1995; MacDuffie, 1995), is accompanied by a variety of new human resource practices or 'bundles'.

However, as the above list implies, approaches to organisational change have often been programmatic and episodic in nature (Rogers, 1983). Managers, keen to secure quick returns, have embraced one new management philosophy after another (Abrahamson, 1996; Gill and Whittle, 1992). Many Australian enterprises have been subjected to wave after wave of organisational change programs, some of them quite contradictory in nature.

NMPs can have a significant impact on employee training. The implementation of change programs often depends on extensive training that involves employees at all levels in the enterprise. The results of the National Survey of Enterprise Training undertaken by the Group for Research in Employment and Training, the Research Centre for Vocational Education and Training (VET) and the Australian National Training Authority underscored the importance of this relationship between organisational change and training. The survey demonstrated conclusively that after size and industry sector, workplace change was the most important determinant of the extent and diversity of enterprise training (Hayton et al, 1996). Therefore, it is not surprising that training often appears as an essential element of the new human resource bundles.

Case study evidence from Australian enterprises (Hayton et al, 1996; Smith et al, 1995) confirms the United States research findings that the introduction of NMPs, particularly teamwork, requires new sets of general behavioural skills from employees. However, the demand for training created by the adoption of NMPs may differ significantly. For example, the training requirements for the implementation of Japanese-style production teams under lean production will be quite different from those associated with the creation of temporary, cross-functional, problem-solving teams under TQM. However, as recent research in the United States of America suggests, extensive training is an essential concomitant of the successful implementation of teamwork, regardless of type (Banker et al, 1996). Thus, training provision and demand in enterprises will differ according to the management philosophy that is currently operational. Many enterprises may lurch from one set of training needs to another, as they pass through successive waves of organisational change.

What are new management practices?

Abrahamson (1997) and others have shown that the proliferation of NMPs is no modern phenomenon. The use of NMPs is often traced back to the introduction of Scientific Management by Frederick Taylor in the early 20th century (Taylor, 1911). Taylor's concern was that in the large enterprises developed under late 19th century capitalism in the United States, managers were beginning to lose control of the production process on the shop floor. Managers seemed to have no techniques that would enable them to control the large immigrant workforces that populated these turn-of-the-century workplaces. Scientific Management comprised a group of simple techniques that placed control of the production process firmly in the hands of
managers and enabled them to extract the maximum effort from their employees, in return for higher wage levels. Since that time, management researchers have developed numerous management techniques based on different theoretical approaches to the behaviour of employees in the workplace (Weisbord, 1987). Principal amongst these new approaches to management are those based on the human relations theory (Mayo, 1945) developed in the 1930s and 1940s, those based on systems theory developed in the 1950s (von Bertalanffy, 1968), and those based on contingency theory developed in the 1970s (Child, 1984).

However, the growth of management techniques appears to have accelerated since 1980, with a large number of NMPs appearing and being adopted by enterprises in an attempt to improve their global competitiveness (Hilmer and Donaldson, 1996). It seems that the increasing level of competition and generally low level of growth experienced in western economics since the early 1970s has led managers to search for ways of improving the performance of their enterprises by managing its resources better. A particular focus has been human resources, which have come to represent a source of sustainable competitive advantage in the face of the easy availability of new technology (Barney, 1991). This research is concerned with the impact of NMPs developed since the early 1980s, including:

- total quality management (TQM)
- just-in-time systems (JIT)
- teamwork
- lean production / high performance work organisation
- business process re-engineering
- the learning organisation.

**Total quality management**

TQM takes a broad approach to the problem of quality. The body established in Australia to coordinate the introduction of TQM, the Total Quality Management Institute (TQMI), defines the process as:

... the management philosophy that seeks continuous improvement in the quality of performance of all processes, products and services of an organisation. It emphasises the understanding of variation, the importance of measurement, the role of the customer and the involvement of employees at all levels in an organisation in pursuit of such improvement.

TQM was adopted widely in Australian enterprises in the early to mid-1990s, although often under a variety of names such as Total Quality Control (TQC), Value Adding Management (VAM) or Common Interest Program (CIP). Although differing in detail and emphasis, all are expressions of the same TQM philosophy described in the TQMI definition above.

Despite the proliferation of varieties of TQM, most variants of the system are based on three guiding principles (Dean and Snell, 1991; Sitkin et al, 1994): customer satisfaction, continuous improvement and treating the organisation as a total system. Customer satisfaction in TQM refers not only to the external customer/client of the enterprise, but also to internal customers. Under TQM, the processes of the
enterprise are identified and analysed into discrete units. Each unit within the enterprise operates both as a supplier to some other unit in the enterprise and as a customer of a previous unit. Thus all transactions in the enterprise can be analysed in terms of customer-supplier relationships. TQM exhorts all employees to ensure that they give total quality to their customers, and at the same time demand total quality from their suppliers. This is based on the collection of hard-quality data, often through processes such as SPC to enable measurement of the performance of different units in the enterprise.

The measurement of the performance of the units of an enterprise leads to the second TQM principle of continuous improvement (sometimes known by its Japanese name of kaizen). This involves employees systematically searching for and surfacing recurrent problems in the process. Often this search and surface activity is conducted in TQM teams or groups, who may meet periodically for this purpose in much the same way as Quality Circles. The role of TQM is in gathering data and analysing it in order to find readily operationalised solutions to problems. Because the problems are usually routine and low in uncertainty, great efficiency gains are often made from the operation of continuous improvement.

Finally, TQM treats the enterprise as a system, using the basic concepts of systems theory to break the enterprise into sub-systems that interact with one another in the course of the production/service process. Such a view naturally lends itself to the customer-supplier notions of TQM. It also entails the system-wide search for solutions to problems. TQM advocates the tracing of problems to their source in the enterprise rather than using temporary, patchwork solutions, therefore creating a chain of causality which guides the TQM process (Snell and Dean, 1992).

TQM programs became very popular in Australia in the early 1990s. Backed by the federal government, the TQMl was established in 1987 as an umbrella body and now boasts over 100 member organisations, including such large organisations as Telecom Australia, Ford, Kokako, Esso and IBM. By 1995, studies by the Group for Research in Employment and Training at Charles Sturt University and the Research Centre for VET at the Sydney University of Technology showed that most Australian organisations were involved in some form of quality improvement program. Quality improvement, and TQM in particular, had become a major driving force for training in many Australian organisations, with large numbers of employees undergoing training in problem-solving and teamwork skills in order to facilitate the introduction of quality improvement programs (Hayton et al., 1996; Smith et al., 1995).

**Just-in-time systems (JIT)**

Since its introduction into western enterprises, JIT has developed into a broader system for the elimination of waste in processes (Bicheno, 1991). Four major processes form the basis for modern JIT (Flynn et al., 1995). A kanban system controls the movement of materials in the plant and automatically signals when stocks are too low and new orders need to be placed. Inventories are reduced. Flexible scheduling allows greater variety in the production process and set-up times are reduced. The implementation of JIT has had dramatic effects on the productivity performance enterprises, with research showing that enterprises that adopt JIT realise the benefits quickly (Lawrence and Hottenstein, 1995). Although these processes have had the
most impact in the manufacturing sector, there is increasing evidence that the concept of JIT and the reduction of process times has spread into the service sector (Duclos et al, 1995).

**Teamworking**

A key element of TQM and other NMPs is the emphasis on small groups and teamwork. This emphasis is not new. Eric Trist and his colleagues at the London-based Tavistock Institute of Human Relations developed the notion of the self-directing work team as the basis for their successful consultancy with the British National Coal Board in the 1950s (Trist, 1963). From this work, the Tavistock group developed the highly influential socio-technical systems approach to organisational change, which put the development of effective work-teams (sometimes known as semi-autonomous workgroups) at the centre of the change process. Socio-technical designs became the focus for the attempts in the 1960s and 70s by large European and American organisations to counter the effects of routine, fragmented factory work on the motivation of the workforce. Known as Quality of Work Life (QWL), these experiments stressed the importance of redesigning jobs to include higher levels of worker control and group work. However, most of these QWL programs did not survive for more than a few years and many of the organisations that had experimented with them returned to more traditional patterns of organising work in the late 1970s and 80s. QWL programs were rarely linked into the business plans of the enterprises, and thus suffered in times of economic downturns (Auer and Riegler, 1990).

Despite the mixed success of QWL, the notion of teamwork has proved highly durable and has undergone a renaissance in the 1990s. Again, the influence of Japan has played a major role in the renewal of interest in teamworking. Although not associated with QWL, large Japanese corporations have been using a similar though more restricted version of teamwork on the shopfloor for a number of years. In their research on the impact of teamwork in manufacturing organisations, Banker et al (1996) identified the following six variants of modern teamworking:

**Traditional workgroups**

This is the traditional work organisation in which workers have no responsibility and in which the ancillary functions are carried out by staff specialists. This form of work organisation is the outcome of the application of scientific management.

**Quality circles (QCs)**

As discussed above, QCs are voluntary groupings of workers that meet to solve quality-related problems in the workplace. These teams play no part in the regular work organisation and for this reason are sometimes referred to as 'off-line' teams.

**High-performance work teams**

These are teams embedded in the process of the enterprise, so they are not off-line. They have responsibility for major but routine activities within a strict hierarchical structure. The decision-making authority enjoyed by these teams is more than a quality circle, but less than a semi-autonomous team.
Semi-autonomous workgroups
These teams are closely integrated into the production system. Typically, a semi-autonomous team will consist of 6-8 members under the direction of a team leader who is also a production worker. A number of team leaders report to a supervisor. This type of team does not necessarily involve any job redesign, although members will be flexible enough to cover other jobs in cases of absence and may carry out simple maintenance tasks.

Self-managing teams (or autonomous workgroups)
Based on the Scandinavian workgroup concept, this type of team usually involves much more extensive job design, with members responsible for setting their own work targets and organising themselves to control large sections of the work process. This form of organisation has considerable implications for the role of the supervisor.

Self-designing teams
These are a more autonomous variant of the self-managing team. In this situation, the team has control over its design and who should belong to the team.

The major difference between these six variants is the level of autonomy that they possess to make decisions in the workplace. Teamwork appears to be the most common of the NMPs, and the most enduring. The longevity of teamwork is perhaps a result of its incorporation into other NMPs, such as TQM and lean production. However, the most common form seems to be Banker's high performance team, in which the team exercises relatively little control over their own activities, but issues their collective skills to improve the performance of the enterprise (Applebaum and Batt, 1994; Osterman, 1994). However, research in the United States has shown that a higher degree of autonomy does not necessarily reduce the productivity and quality gains associated with high performance teams (Shalken et al, 1997).

Lean production/high performance work organisation
Lean production incorporates all the features of TQM, JIT and teamwork, but combines them into a system of work organisation that allows enterprises to run their operations with a minimum of resources (Womack and Jones, 1994). Thus in a typical lean production situation, the enterprise will run with a minimum of inventory, use a JIT system for deliveries from suppliers, form the workforce into high-performance teams and implement TQM methods to eliminate problems in the production/service process.

The notion of lean production was popularised by the MIT study of car assembly plants worldwide, conducted in the late 1980s and reported in The Machine That Changed the World (Womack et al, 1990). The MIT authors and others (Adler and Cole, 1993) have argued that the success of the Japanese car industry lies in its vigorous adoption of lean production methods. They also argued that the history of Japanese 'transplants' in the United States of America shows that there is nothing culturally specific about lean production, but that it can be successfully introduced into countries outside Japan. Studies of successful transplants, such as the Toyota-General Motors joint venture in California (NUMMI), has demonstrated that adoption of lean production methods results in high levels of productivity and product quality. However, this research has led to considerable debate about the real effectiveness of lean production, particularly in comparison to work organisation.
based on more human-centred approaches using autonomous teams, such as those pioneered by Volvo and other Scandinavian enterprises (Berggren, 1994).

High-performance work organisations combine some of the elements of lean production with a more human-centred approach (Cappelli and Rogovsky, 1994). High performance workplaces have adopted a set of employment practices designed to gain the commitment of employees, including:

- employee empowerment and participation in decision-making
- teamwork: quality circles, QWL programs, semi-autonomous teams, etc.
- job rotation and cross training
- supportive personnel policies including profit sharing, job security and pay for training in communication and interpersonal skills

These practices are designed to foster employee commitment, so that enterprises can develop a highly skilled workforce which is trained to innovate and to retain America's competitive edge in the international economy through new product development, rather than low-cost production. The full extent of the adoption of these practices by United States enterprises is the subject of much debate, but estimates suggest that by the mid-1990s, over half of American workplaces had adopted two or more high-performance work practices (Osterman, 1995).

This high-performance work organisation has been described by the acronym SET, standing for Security of employment, Employee involvement and Training. SET workplaces can be contrasted with the traditional JAM workplace that is based on Job classifications, Adversarial employee relations and Minimal training (Brown et al, 1993). The three elements of the SET system are interlinked. One cannot be fully implemented without the others. Thus, employees will only become involved with the company's decision making if they are assured of job security. Similarly, job security - or rather, its obverse - employment stability, plays a significant role in the company's decision to train; workers likely to leave the company for higher wages elsewhere will not be trained.

**Business process re-engineering (BPR)**

BPR has been described as the latest 'fad' in the management of enterprises (Mumford and Hendricks, 1996). Based on the work of Hammer and Champy (1993), BPR is premised on the notion that few organisations have been able to take full advantage of advances in information technology because of the way in which their processes are organised. Hammer and Champy argue that merely automating existing processes, which may have remained unchanged for many years, will not yield a sufficient return to the enterprise in terms of improved performance. BPR is a system for reviewing the processes inside enterprises, so that they can be effectively automated. BPR advocates are noted for using colourful language to describe the processes involved in BPR, such as 'smash the hierarchy' or 'obliterate not automate' (Wilmutt, 1995). However, the process of BPR incorporates many aspects of the other NMPs discussed above (Conti and Warner, 1994). Thus, BPR involves assigning cross-functional teams to investigate and review the core processes of the enterprise. The teams then reorganise the work processes to maximise the value added in the
process and go on to initiate continuous improvement. BPR thus incorporates elements of TQM and teamwork, but takes a more radical approach.

However, critics have shown that there is great confusion about exactly what BPR involves (Buchanan, 1997). As a result, enterprises tend to implement BPR in different ways and will reinterpret its message to suit their own internal purposes. This has often resulted in BPR becoming associated with heavy programs of downsizing, especially amongst white-collar and management groups which have hitherto escaped retrenchment (Littler et al, 1997). Drago (1996) has shown that BPR has been a major contributor to the creation of 'disposable' workplaces, in which managers can force change through the threat of closure or downsizing. The connection between BPR and downsizing has meant that few enterprises have found employees willing to take part in a participative approach to BPR, when their own jobs may be at stake. Hence there is little evidence of the extent of adoption of BPR, and many believe that it may take up to 15 years for the concept to be taken up in its pure form by enterprises (Conti and Warner, 1994).

**The learning organisation**

Over time, however, some organisations continue to change and improve, whilst others find it more difficult. A learning process would therefore appear to take place within organisations that enable them to survive in changing environments. Early organisational learning theorists Fiol and Lyles (1985) described organisational learning as '... the process of improving actions through better knowledge and understanding'.

Yet there is a difference between organisational and individual learning. Organisational learning is not simply the sum of the learning of each of the individuals in the enterprise. Organisational learning implies a capacity to transmit the lessons from one generation of employees to another, and to adapt as a result of the learning process.

The processes of adaptation and learning are not the same. Adaptation is the process of adjustment to changing circumstances. Organisational learning is a much deeper process involving the development of insights and knowledge over a long period of time, and the ability to critically assess the assumptions on which the organisation is basing its actions. Argyris and Schon (1976) first pointed to the distinction between these two processes in organisations. They distinguished between single-loop and double-loop learning. Single-loop learning is essentially equivalent to adaptation. It is short-term behavioural change often associated with previous behavioural responses to similar situations, eg. discounting the price of products when demand slumps. Double-loop learning involves a process of questioning the assumptions on which the organisation is acting. It occurs throughout the organisation and has implications for everyone.

Senge (1990) has identified five conditions for organisational learning to take place.

**Systems thinking**

As in TQM, systems thinking involves looking at the organisation as a whole system, in which changes to one part of the organisation necessarily produce changes in another. Senge regards systems thinking as difficult for managers in many
organisations, who are conditioned to think in terms of single causes for events. Thus, change programs may be initiated anywhere within organisations. Managers need to recognise and capitalise on changes that take place, rather than attempting to fit the organisation to their own view of how change should proceed.

**Personal mastery**
The learning organisation fosters growth and development in all of its employees. However, it is the responsibility of individuals to take charge of their own destiny and create their own opportunities for personal development. Thus, an organisation's commitment to learning can only be realised through individuals taking responsibility for their own learning.

**Shared mental models**
The means of overcoming the gap between individual and organisational learning is through sharing mental models. Kim (1993) has shown that mental models are the routines and frameworks that we use everyday to make sense of the world and guide our actions. These mental models change in the course of individual learning, but this does not benefit the organisation unless we can share these models and how they change with others, so that they can learn also. The learning organisation adopts strategies to enable the sharing of mental models to take place, so that organisational learning can occur.

**Shared vision**
This is a notion taken from the theory of leadership. A good leader has a personal vision that he or she is able to articulate to other members of the organisation. Thus, in the learning organisation, leadership is a well-distributed capability, and all members have their own personal visions relating to their work and their careers. The learning organisation allows its members to share these visions and to subscribe to a common vision that binds them together.

**Team learning**
At the heart of the learning organisation is teamwork. Effective teamwork allows all the members of the team to learn together and to set their own direction in line with the shared vision of the organisation.

A particular difficulty with the notion of the learning organisation is to what extent organisational learning is simply the sum of all the individual learning that goes on within the organisation, or whether it is possible for the organisation to learn apart from its individual members. The learning organisation provides opportunities for individuals to learn and develop, but it must also have ways of ensuring that individual learning is retained for the benefit of the organisation. This is the role of memory. Just as individuals learn through committing lessons to memory, so organisations learn by developing procedures that act as organisational memory. The learning organisation must therefore be able to develop procedures that ensure that the fruits of individual learning are recorded and used by other members of the organisation.

However, the popularity of the concept of the learning organisation has yet to be justified by research showing its adoption by many organisations. Research conducted in Britain (Raper et al, 1997) suggests that, whilst some individual elements of the learning organisation may be present, there are few if any
organisations that have implemented the learning organisation as a 'total package'. Senge's idea may remain an ideal towards which organisations strive, rather than an empirical reality.

The links between NMPs

There are considerable links between different NMPs. Certain techniques such as teamwork seem to underwrite all the NMPs (Ichniowski et al, 1996), and other NMPs work better when they are implemented together in enterprises. Thus it is clear that experiments with QCs in the early to mid-1980s paved the way for the introduction of TQM. The small group, off-line work that characterised QCs is also a key guiding principle for the implementation of TQM, which uses the problem-solving methods of QCs, but extends, refines and combines them with a systems-based approach to produce a more comprehensive system of quality assurance. There is also considerable evidence for the synergies between JIT and TQM (Dean and Snell, 1991; Flynn et al, 1995). The reduction of inventories and batch sizes characteristic of JIT helps the implementation of TQM by exposing quality problems in the production system much earlier, thus allowing the enterprise to use TQM methods to solve these problems as they surface. Similarly, TQM reduces process times and helps to lower inventories, thus feeding into the implementation of a JIT system. Flynn et al (1995) have shown that enterprises implementing JIT and TQM together reap higher performance improvements than those which implement only one or the other approach.

As noted earlier, lean production is an amalgamation of many other NMPs into a more coherent system. Thus Osterman (1994) and Cappelli and Rogovsky (1994) have shown that lean production or high performance work systems comprise the joint implementation of JIT, TQM and teamwork, so that each NMP complements the other. This notion of implementing a number of NMPs together for better effect has been investigated by MacDuffie (1995), who has shown that NMPs work more effectively when they are implemented together, particularly when they are supported by other human resource practices. Working with the data from the MIT study of the world car industry (Womack et al, 1990), MacDuffie shows that work practices involving teamwork, problem-solving groups, employee suggestion schemes, job rotation and decentralisation of quality tasks produce the greatest impact when implemented together. MacDuffie's work practices are closely related to the NMPs of TQM, in that they involve teamwork. He goes on to show that these practices work best when implemented in a JIT environment of low inventories and reduced set-up times, and when they are supported by innovative human resource (HR) management practices, eg. More effective recruitment and selection, performance-based pay and extensive training of new and existing workers. MacDuffie uses the term 'bundles' to describe the coincident implementation of NMPs and innovative HR practices within a JIT manufacturing environment. He also provides the best evidence to date that NMPs work better when their considerable synergies are harnessed, rather than when implemented in isolation.

The theory of the learning organisation also shares considerable common ground with the key concepts of TQM and teamwork. Kim (1993) and Senge (1990) stress the importance of shared learning in teams as a key element of building a learning organisation. Sitkin et al (1994) distinguish two forms of TQM - Total Quality Control
(TQC) and Total Quality Learning (TQL). Whereas TQC is focussed on improving the process of the enterprise as it stands and on satisfying current customer needs, TQL is focused on the future, on improving the processes of the enterprise and on educating customers to expect more from the enterprise. Thus TQL points clearly in the direction of the learning organisation, which is constantly reviewing its operations and improving them.

BPR shares a focus on the rational-technical efficiency of the enterprise with JIT. However, BPR’s prescription of reviewing and reconstituting the processes of the enterprise, in order to take full advantage of the new information technology, shares considerable common ground with the notion of the learning organisation in which all aspects of the enterprise’s operation and performance should be open to question and radical rethinking.

Thus, NMPs share many features in common and it is not unusual for enterprises to experience NMPs as waves of change that seem to follow in succession. Often enterprises are still in the midst of implementing one NMP when another will be adopted by the enterprise and seem to lead inexorably from it. Thus, many enterprises report having experimented with QCs, moved on to implement TQM and/or teamwork and then into the more radical prescriptions of BPR. The internal circumstances of individual enterprises vary considerably, and managers may be attempting to achieve a number of goals in their adoption of NMPs (McCabe, 1996). As enterprises will often tailor the basic concepts of NMPs to their own circumstances, each NMP may appear in a variety of forms. Overall, the changeover between NMPs, the variety of their forms and the fact that they are often implemented simultaneously may make it difficult for enterprises and researchers alike to distinguish one NMP from another.

**NMPs – autonomy or control?**

A key issue in the implementation of NMPs is the extent to which they are concerned with the enhancement of employee autonomy (empowerment) or the extension of managerial control over the production/service process. This reflects the debate that has been conducted on the role of new technology in the formation of skills in enterprises. Advocates of the labour process tradition (Braverman, 1974; Wilkinson, 1983) have argued that managers introduce technology into enterprises with the purpose of deskilling jobs and reducing costs by using unskilled labour. More recently, post-Fordist scholars (Mathews, 1994; Piore and Sabel, 1984) have argued that technology can be used to ensile jobs and give employees greater autonomy in their working life, and that the greatest benefits are to be reaped by enterprises that follow this path. A similar debate has taken place with regard to NMPs. Those working from the tradition of a labour process view NMPs as another means of extending management control on the shopfloor, by persuading employees to control and regulate themselves rather than imposing control upon them. Advocates of NMPs view them as a means of extending greater control to employees and improving the quality of their working life.

Advocates of NMPs have highlighted their role in the empowerment of employees (Adler and Cole, 1993; Bergrrren, 1994; Mathews, 1994). From this point of view, NMPs act to give greater responsibility to shopfloor employees and power is decentralised from managers to lower level employees. This is a conscious strategy.
by managers, who realise that the old Taylorist systems of work organisation lock up
the knowledge and skills of employees, discouraging them from thinking for
themselves or taking initiatives at work. But managers do not always know what is
best, as the employees who work closest to the task often know how to achieve the
task in more efficient ways and with higher levels of quality. NMPs such as
teamwork and TQM give employees the opportunity to use the knowledge they have
gained in their work and put it to the service of the organisation. Many of the NMPs
operate on the principle of unlocking the knowledge and skills of employees. Thus,
TQM is premised on the principle that all employees must take responsibility for the
quality of their own work. BPR also goes so far as to suggest that many managers are
redundant in organisations, because the employees know what needs to be done and
how it should be done best.

The notion of employee empowerment reached its zenith in the new forms of work
organisation pioneered by Volvo at its Kalmar and Uddevalla plants in 1979 and the
1980s (Berggren, 1994; Sandeberg, 1995). At these plants, the traditional assembly
line organisation of the car industry was abandoned in favour of 'dock assembly'
carried out by fully autonomous teams of multiskilled workers. The performance of
the two Volvo plants was a source of considerable debate amongst academics. The
MIT team claimed that the productivity and quality levels attained under the Volvo
team system were not as high and consistent as those attained under the lean
production methods employed by Toyota and the United States Japanese
transplants. Volvo closed Uddevalla and Kalmar in 1993. However, the MIT team
suggested that despite the lack of autonomy of the teams under lean production, the
quality of work-life for employees and the level of responsibility they enjoy are
higher under lean production than in the traditional mass-production environment

However, critics of NMPs have argued that the benefits for employees working
under such systems as JIT and TQM are illusory. They also contend that many of the
NMPs can be categorised forms of 'modified Taylorism', in which employees
internalise the controls that were formerly imposed on them by management (Conti
and Warner, 1994). Webb (1996) has shown that TQM, a central feature of the lean
production system, results in greater levels of centralised control rather than
decentralisation of power. Her study of the introduction of TQM into three
organisations shows that despite the rhetoric of partnership adopted by
management, the results of the introduction of TQM were a program of downsizing
and an intensification of work for those left behind. For Webb, TQM and other NMPs
allow managers to adopt a 'vocabulary of motive' which claims to empower
employees, but in reality reduces the conditions they enjoy and extends management
control:

In the context of takeovers, crises, refinancing operations and
recession, TQM is likely to be used as the basis for renewal of
management ideology: using the language of teamwork,
continuous improvement and partnership, it gives senior
management legitimacy for centralisation, the promotion of a
unitarist view of the organisation and the representation of the
intensification of work, without greater autonomy, as
Similar criticisms have been made of other NMPs. In particular, JIT has been the focus of many studies in Britain and Europe, which concluded that the system amounts to an extension of management control through the close ‘surveillance’ of employee activities. When the production system is run without buffers, any employee mistakes are highlighted immediately and can be traced back to the employee that perpetrated the mistake, enabling management to more effectively reinforce discipline on the shopfloor (Delbridge, 1995; Sewell and Wilkinson, 1992). Similarly, BPR is also premised on a rhetoric that highlights the importance of employee involvement in the process of reviewing and reorganising processes in the workplace. However, the reality of BPR implementation has often been quite different, with many organisations using BPR to achieve downsizing targets and impose the new methods in a top-down fashion (Wilmott, 1995). Further, employees have not always greeted NMPs with enthusiasm. Research on the United Kingdom car industry has shown that employee attitudes towards NMPs, particularly lean production, are often quite negative. Many employees report poor communication practices by managers involved with the NMPs and an intensification of work, rather than greater autonomy and empowerment (Stewart and Garrahan, 1995).

However, as with the technology-skills debate, it may be that the reality of the impact of NMPs is empowerment for some groups, but higher levels of control and work intensification for others. As Thompson and his colleagues have shown, the implementation of NMPs and their impact on skill levels and working conditions for employees varies significantly between countries and between companies. The institutional arrangements for industrial relations and VET give rise to different expectations on the part of employees and managers about the best way to organise work. Similarly, the culture and histories of multinational firms that cross national boundaries can result in quite different approaches to the implementation of NMPs and the role of employees (Thompson et al, 1995).

New management practices and training

The introduction of NMPs has significant implications for training. Research in Australia has shown that in 1994/95, quality improvement was the single most important factor driving training provision at the enterprise level (Hayton, 1996; Smith et al, 1995). A training practices survey conducted by the Australian Bureau of Statistics (ABS) has also confirmed that the introduction of workplace change and the restructuring of work organisations are key factors reported by firms for increasing their level of training provision. However, the nature of the training provision may be quite different for each of the different NMPs examined in this review.

TQM

Training has a significant part to play in the introduction of TQM (Smith, 1998). Typically, a TQM program is introduced from the top of the organisation and cascades through all its levels. At every level, teams are formed to analyse each department's activities. Each team requires training in group processes and the statistical process control methods that are used to collect and analyse performance data. In the case of large organisations, this often involves training programs running continuously over periods of years. The size of such a training task inevitably involves the use of non-training specialists in a training role. As a result, trainer-training programs become an immediate priority for organisations introducing TQM. Beyond the collection and analysis of data, those involved in TQM are most
Training, teamworking and new management practices

frequently trained in behavioural skills such as communication, teamwork and customer service (Smith et al, 1995). Thus the introduction of TQM often involves a heavy and prolonged investment in training from organisations (Osterman, 1995). The implementation of TQM has often been the catalyst for organisations to move away from simple technical training to training in behavioural skills, which is one of the key features of training for NMPs (Osterman, 1994).

Teamwork
Implementation of all variants of teamwork involves considerable training input. Teamworkers need to be extensively trained to cover jobs other than their own, and in the case of the more autonomous teams, to take on more highly skilled tasks. Team leaders and supervisors need to be trained in their new roles as facilitators to the teams. The research of Banker et al (1996) has shown that training is a key ingredient for the success and longevity of teams. Teams that do not undergo extensive training tend to work poorly and to disintegrate in a short period of time.

JIT
The nature of JIT, a more rational NMP (Abrahamson, 1997), does not have the implications for training of other, normative NMPs. The effect of JIT is to reduce inventories and cycle times and introduce greater efficiencies into the organisation. Training may be required to operate a new JIT system such as Kanban, but this NMP is not accompanied by the heavy investments in extensive training that characterise TQM and teamwork.

Lean production/high performance work organisation
The research of Cappelli and Rogovsky (1994), Osterman (1995), Snell and Dean (1992) and others has shown that the adoption of high performance working practices involves an increased commitment to training from organisations. Osterman has shown that the adoption of JIT, teamwork and TQM as a group of working practices associated with the high performance work organisation results in more extensive training for employees at all levels in organisations. These practices require new sets of skills, primarily behavioural. Similarly, MacDuffie and Kochan (1995), working with the MIT data, have shown that car plants adopting lean production train more than traditional mass production plants. Studies in Europe have confirmed the extent of training under lean production (Kabst et al, 1996). Unfortunately, although these studies confirm the impact of NMPs on the volume of training, they do not investigate the type of training that takes place, other than the emphasis on behavioural skills uncovered by Osterman's work.

BPR
As with JIT, BPR can be classified as a rational NMP (Abrahamson, 1997). The focus of BPR is on the review and restructuring of processes within the organisation. Presumably, training would be part of the adoption of new processes, but there is little in the existing literature to suggest the nature and extent of training that accompanies BPR.

Learning organisation
The focus of the learning organisation is on opportunities for individual learning that can be captured by the organisation, rather than on training. Thus, the literature on the learning organisation highlights the importance of informal and incidental learning in the workplace (Marsick and Watkins, 1990). Much learning takes place
incidentally whilst working. However, work can be structured so that the learning takes place more systematically and can be captured by the organisation. Thus it is informal learning – it takes place outside the training system, but is still consciously structured by the organisation to enhance employee learning and organisational performance. The training that occurs within the learning organisation is thus more likely to be workplace-based, informal and on-the-job, and concerned with helping individuals structure their own learning experiences rather than imparting certain pre-determined skills.

Conclusion: the role of training

Training is a key element in the implementation of all the NMPs examined in this review. Despite the differences in approach and philosophy between NMPs, a number of conclusions can be drawn about the general role of training in the new management practices.

There is a move from technical skills to behavioural skills. In all of the NMPs examined in this review, the demand for skills was changing from technical, job-specific skills to behavioural skills. Osterman (1995) and Cappelli and Rogovsky (1994) have shown that the implementation of high performance and lean production organisations is associated with extensive training in problem-solving and teamworking skills. In Australia, the Industry Training Studies project (Hayton et al, 1996; Smith et al, 1995) revealed that employers were demanding training that influenced the attitudes and behaviour of their employees. Also, traditional, technical skills training was being outsourced to equipment vendors, as new methods of management were introduced as a result of the impact of the quality movement.

The emerging emphasis on behavioural skills has also been explained as a means of gaining employee compliance to the introduction of NMPs. Heyes (1996) has shown how the emphasis on behavioural skills training was necessary to the introduction of TQNM in a chemicals firm in the United Kingdom. Although employees were trained in the technical skills of quality data collection and analysis, their willingness to use their knowledge gained at work for the benefit of the organisation could only be secured by generating enthusiasm and commitment to the organisation. Thus, behavioural skills training in this organisation helped to change employee attitudes and gain their commitment to deploy their skills. As a result, there appears to be a strong element of repetition amongst the training programs associated with different NMPs.

Training is part of a ‘bundle’ of supportive HR practices. The work of MacDuffie and others (Dyer and Reeves, 1996; MacDuffie, 1995; MacDuffie and Kochan, 1995) has shown that the successful implementation of many NMPs associated with lean production and with the high-performance organisation depends on the parallel introduction of a range of supportive HR practices. Training appears as a significant element in all of the ‘bundles’ of HR practices identified in these studies. Thus, training is not a sole factor operating in isolation to facilitate the introduction of NMPs; the success of NMP implementation depends upon a range of factors, including the practices of new forms of remuneration and employee selection. These
HR practices should display a high level of internal 'fit', so that they work together to aid the implementation of NMPs (Dyer and Reeves, 1996).

Training is implemented from the top down. The introduction of NMPs most often takes place from the top down in organisations. Decisions to implement NMPs are usually taken at senior levels in organisations and imposed on the rest of the organisation. Training for the introduction of NMPs also typically follows this top-down pattern. This 'cascade' approach to training for NMPs can perhaps be best seen in the implementation of TQM. Here, training for the new quality practices is implemented first with the top team of the organisation, and then the same principles are embodied in training programs that work their way down through the organisational hierarchy.

Training for NMPs is a strong driver of enterprise training. The Industry Training Studies research showed that the most important driver of enterprise training was the implementation of workplace change (Hayton et al, 1996; Smith et al, 1995). Foremost amongst the programs of organisational change that were driving enterprise at the time of the research was the implementation of quality programs. These results have been confirmed by the ABS in their survey of employer training practices (Australian Bureau of Statistics, 1994, 1998). The ABS results show that, after the impact of technological change, the most important factors causing organisations to increase their training expenditure were changes to management practices and the need for improvement in quality.

Training for NMPs is usually sourced internally. Although consultants and other organisations play a role in the diffusion and implementation of NMPs (Abrahamson, 1996), much of the training is carried out in-house using the organisation's own training staff or staff trained as trainers. Very little of the training for NMPs is sourced to external training providers. Often the training that is provided is short, sharp and focused on-the-job. It is much less expensive for training to be provided by the organisation rather than sourced to external training providers. This has significant implications for the training market.

To summarise, training is a critical element in the introduction of NMPs into organisations. Although the role of training has been acknowledged in the many studies of NMPs that have taken place in recent years, it has rarely been the focus of research. There is a need to clearly understand the role of training shaping the ability of organisations to undertake successful organisational change.

References


Teamwork, collective competence and team-based assessment in action: critical reflections on industry-based vocational educators

Crina Virgona, Peter Waterhouse and Robin Sefton
Workplace Learning Initiatives Pty Ltd

Within most assessment systems, it is individuals that are deemed to be competent or incompetent. Yet in many workplace contexts, it is the performance of groups or teams of people that is most significant. This implies a notion of collective competence that incorporates the range of skills within a group and the group's ability to identify and harness effectively the particular skills, or clusters of skills, applicable to particular circumstances. This might also be considered as a form of strategic competence. Team-based approaches to assessment can be used to identify and assess the features of collective and strategic competence in action. However, such approaches highlight the social and collective nature of competence and raise questions about how and where such approaches sit within Vocational Education and Training (VET) systems and providers. This paper explores these questions through the critical practice of a group of VET teacher-researchers engaged in enterprise-based training.

The focus on teams¹ and teamwork in many modern workplaces raises a number of questions about competence, performance and the nature of work itself. Such questions lead us to consider the ways we conceptualise work, teams and skills, and reveal the contradictory discourses that live alongside each other in industry.

The origin of our intellectual construction of workplace activity and workplace structures is interesting to ponder. How do we frame our understanding of work in manufacturing industries and why do we accept this framing? Marsick had some thoughts on this:

Much of the early theory came from military experience prior to guerrilla warfare, and was well suited to organisations whose predominant mode of operation might be described by the metaphor of a machine (Morgan, 1986). Characteristics of the social organisation of the workplace included logic, rationality, linear cause-effect relationships, clear demarcation of responsibilities, hierarchical control and forged unification of the movement of parts into a whole, which minimises duplication and overlap. (Marsick, 1991: 84-85)

The military model had a number of advantages, not least of which was that authentication was vested in science. Fredrick Taylor's 'scientific management' ¹The notion of 'team' itself produces conflicting discourses. The Japanese discourse speaks of small organisational units with no autonomy and controlled responsibility in keeping with lean production systems. The German discourse describes teams or work groups that operate with considerable autonomy (Hampson et al, 1994). The reference to teams throughout this paper is framed around the latter.
Teamworking, collective competence and team-based assessment

(1947) held certain attraction in its title alone:

If one school of thought has been a thread to link the others, it is Taylorism with its claim that management can be a true science and that 'science' can be universally applied. Even though other schools appear to humanise the conduct of management, the Taylorist emphasis on control and efficiency in the interests of an organisation and of a country has survived as an essential piece of management wisdom. (Rees, 1995: 17)

The advantages of approaches beatified with scientific affiliations were considerable. They delivered the mechanisms for control and organisation into the hands of management and provided logic and system to activity, making it intelligible to observers. They provided control and authority over the expertise of groups of skilled individuals who might otherwise be operating independently and unchecked. Scientific approaches also allowed managers to better control the affective aspect of work. Blackmore (1993: 40) makes these observations:

... not only because science was seen to be a more 'objective' form of knowledge production during the post war period but also because scientific knowledge promised those who practised administration and policy development predictability, comparability as well as objectivity, thus imparting greater authority to administrative experts. The epistemological foundation of the view of administration as neutral, rational and value free enterprise in the period after the Second World War was positivism. Underpinning emergent organisational and management theory since the 1950s, positivism made privileged claims to objectivity, predictability and universality, claims which separated means from ends, facts from values.

And, we might add, knowledge from knowers.

So it is the values of dispassionate objectivity and rational control that have preserved the status of science in industry. Positivist science purports to create hard, provable truths that then devolve into economic inevitabilities. The role of management is to impartially deliver the inevitable. While some schools of thought have indicated a new age is dawning in post-Fordism and new capitalism, the economic imperative may hold traditional values in place for some time yet:

The claim to moral neutrality and scientific objectivity suits an age in which economy has come to be regarded as more important than society and in which a brand of economics has claimed scientific qualities. (Rees, 1995: 17)

In matters of training and skill development, the culture has remained consistent. When industry restructuring introduced formal training for shopfloor employees, the Taylorist model was so entrenched as part of the dominant discourse, that the dissection of jobs into sequenced portions was the 'commonsense' approach. This provided teachable tasks, each one able to be tested and measured.
In modern efficiency, that which is efficient is defined as that which is measurable as efficient. Consequently whatever is not measurable is not efficient and does not exist. (Solondz, 1995: 214)

Much of manufacturing industry is structured and managed around modular controllable bit-size pieces. They provide the units for quality measurement and rectification, the basis for benchmarking and performance indicators, the components for line balancing and of course the means to organise learning and assessment. The most significant modular unit is however the individual worker. It is he/she who is measured and matched as a neutral set of standardised skills, who will repeatedly reproduce the output in measured time.

These premises are so comfortably established within the dominant discourse of industry, that other constructs are received with bewilderment. The question this leads one to ask is: how useful is this construction of work? Does this describe the way people really work?

A number of theorists and industrial educators (Darrah, 1994; O'Connor, 1995; Stevenson, 1996) would say that the investment in skill development within the individual, and the modular construction of skills analysis, deflect our attention from the way work is actually achieved in the workplace. Their empirical studies tell us that much work knowledge is team-based and constantly evolving, that work outcomes are collaborative and that daily activity is adaptive and responsive to the workplace context. We understand what to do and how to do it by becoming part of the 'community of practice' (Gee, 1997).

Let us look briefly at the work conducted at a company where we are training. Let's call it Manfred Engineering. The company designs and modifies vehicles to enhance them for high performance motoring. The current work on the shopfloor includes lowering the suspension to increase road purchase when cornering, adding inlet manifolds to allow for more air intake (thus increasing the power of the engine), changing wheels and tyres, adding body kits to create a sporty appearance and other options. The company also produces some short-run models that cover a full range of options.

A project team is involved in designing and developing each model. The design engineer attempts to create an appropriate sporting image, the mechanical engineer ensures that the capacity of the car lives up to this image and the manufacturing engineer edits the enthusiasm of the others by ensuring that their ideas are buildable on the line. The quality engineer sets standards for the parts and processes, the purchaser finds parts that meet the quality requirements as well as the engineering requirements, and the finance officer makes sure the ideas meet the budget. Everyone has an integral part to play. They need to work with an understanding of the company's market and within the capacity of the company's physical, skill and financial resources. No single role is the exclusive province of the one individual, as ideas are contested and refashioned to meet the constraints.

When the new model arrives on the line, shopfloor employees work in consultation with the manufacturing engineers, designing processes and refining parts. Once in production, shopfloor employees need to work cooperatively with others on the line.
To ensure the smooth movement of the vehicle through its staged development, sharing knowledge on the most efficient and effective means to achieve a quality job in the allocated time.

The expertise of each individual is an important facet in the achievement of the product, but individual contributions are virtually invisible. The productivity, processes and errors are everybody’s responsibility. Operators understand the criteria upon which quality is judged. They interact with engineers, supervisors and colleagues, sometimes adapting and modifying their practices to maintain the standards.

This is not unique to Manfred. Darrah (1992: 270), as a result of his empirical investigations, came to the following conclusions:

A narrow focus on individual job skills is inadequate. Rather analyses that place people in the actual contexts in which their activities are shaped and given meaning are needed. Such analyses must recognise context as a dynamic component of a larger system. If context can be so analysed, we may then not only seek to improve the skills of individuals to work in extant workplaces, but also improve workplaces as arenas in which learning for improvement is facilitated.

In the messiness of everyday work, skills are not evenly distributed, and while the special talent of certain individuals advantages the team, some members have to pick up on the gaps and errors of others. The timeline is always almost beyond the team’s capacity; the customer changes specifications while the job is already underway, parts are sometimes unavailable and resources are inadequate. However, the due date is not negotiable. The quality of the interaction between team members, their willingness to share skills and help each other, their creativity in overcoming obstacles, their bond of common purpose, their intimate understanding of the standards and their identification with the project are the qualities that will deliver a quality job on time.

Where is the impartial analysis of modular bit-size pieces now? It started off tidy - clear job delineation, defined goals and a non-ambiguous project plan - but the end is a fortuitous, sometimes desperate struggle over the finish line. The modular pieces have merged into an interplay of skills, many of which have never been named as competencies - creativity, skill sharing, managing group dynamics, adaptability, redefining the workable, changing pathways. The key capacity is one of strategic competence - doing the best you can with what you’ve got. It looks more out of control than measured science can process.

The shopfloor is not all that different. Automotive parts are meant to be standardised, but the parts manufacturer has constant problems with a few of them. The operator struggles to reshape them so that they fit correctly. Maybe a moulded jig would provide the answer. The problem has been reported to the engineering department, but they are flat out with the new model. The shopfloor operators improvise and play with ideas to achieve consistency.
Sometimes there is an urgency to achieve a higher number of cars for the day. The operators know that the glues need to be cured for five hours. How can the productivity level be achieved while preserving the curing time?

If these are normal ways of working, what are the major considerations for training and assessment? It seems that:

- team and company identity are essential in achieving the energy and in setting the direction of a project
- a holistic understanding of the customer needs, the market and the mechanisms of design and production is integral to ensuring product viability
- effective communication is key to achieving product output
- coping with change and adaptability are essential qualities for success
- strategic competence is deeply contextualised and not reducible to a set of skills
- individual skill levels are only part of the story

If training is to reflect and facilitate effective workplace practice and change, then traditional modularised skills training that is assessed individually does not go far enough.

In the past, these characteristics may have only described the work of company specialists. But with the advent of the team as the primary organisational unit and with the devolution of quality control, training, safety and scheduling to the shopfloor, these features increasingly describe the work of factory operators as well.

With Manfred anxious to move into self-managing team-based production on the shopfloor, the training provider designed a program to begin the development of new skills. In the first stage, it seemed necessary to build a better understanding between the major work groups. In keeping with the traditions of Taylorist scientific management, the shopfloor had been quarantined from the office activity of vehicle design and development. Most shopfloor operators came into contact with new models and new options when they arrived on the factory floor for the final stages of product development. Operators adapted their experience to the new jobs, reapplying the basic principles and processes to meet the new requirements. However, they had little significant understanding of the design, development and production planning process that preceded the job's arrival on the floor. The divide between the shopfloor and the office was considerable. They identified themselves as coming from different work cultures. Each regarded the other as 'getting it easy', and different pay and working conditions made for contradictory expectations in behaviour, work and attitude - and of course - pay.

The training program was funded by the Office of Training and Further Education and the company responsible for conducting the Vehicle Industry Certificate, a level II Australian Qualifications Framework course for production workers. The client group for training was therefore composed of shopfloor employees, but we designed a program that would involve the whole company - designers, engineers and quality and finance people - in an effort to build bridges and unite the subgroups. The nub of the program was the simulation of the company's design and development processes applied to building billy carts. 'Mancart' teams duplicated the roles and functions of each of the players in the product development teams. They would
develop and test a prototype then build another two duplicates. For us, the trainers,
the program design involved tracing the processes, defining the players, developing
job descriptions, following the paper-trail and making it transparent to the 'Mancart'
teams. The trainees grouped themselves into four teams. Each team member had a
different role. Corresponding people from actual project teams worked with the
Mancart teams, helping them to understand their work. Each team was given a
budget of $60 per cart. A group of school children became the customers. An alliance
was built with a local school, who assisted us with market surveys to determine
some of the specifications. Later, the children tested the prototypes and finally joined
in the carnival day. The finished products were donated to charity.

There were some important critical features captured in this program that beckoned
the new era of teams-based shopfloor production:

• the accountability factor – teams had to find their own way of meeting the
budgetary and time specifications, with an immovable deadline
• the competitiveness – one team would be a winner, and the win represented an
aggregate of scores across a range of complex criteria
• the achievement depended upon teamwork, creativity, skill sharing, strategic
and collective competence
• the end goal and quality requirements were clearly specified, but the 'how' had
to be determined by the group
• the groups developed a strong team allegiance, which provided the energy to
strive for excellence
• they unconsciously took on an ambassadorial role, in defining the identity of the
company as a socially responsible community entity involved with schools and
needy groups

Assessment was divided into three stages. The first was a self-assessment process,
where the teams compared and assessed their carts alongside that of other teams.
The second involved the whole company in a billy-cart show, a bit like the motor
show. Each team displayed their products, describing the development processes
and providing a full set of paperwork. Experts from project teams within the
company and from Ford were asked to assess the achievement of each team using
the criteria they would apply in judging their own work. They assessed design,
strength and durability, quality, financial accountability and innovation. Team
members explained the processes they used and the rationale behind their decision
making. The third stage was the celebratory day at Calder Thunderdome. The billy
carts were tested for speed and handling by professional race car drivers and the
customers announced their favourite cart

Another level of assessment took place in investigating the growth of key
competencies. This was done informally, through discussion and observation. We
built in challenges that provided opportunities for growth in these areas and
allocated them to individuals as we saw fit. We found opportunities for reticent
individuals to speak in public, for others to explore the alien genre of writing Process
Control Plans and for others to explore technical questions with the engineers. No
individual had a full exposure to all of the learning experiences, but across the team,
members watched and assisted each other, dealing with tasks that stretched their
capacities.
The assessment process was entirely team-based. While team members complained that the load was not evenly dispersed, and many an educationalist has taken issue with this method of assessment, the managing director was fully supportive. As he saw it, there is no value in non-specialist skills and knowledge locked away within the heads of individual workers. The skills that could be pooled to achieve a team output were the skills that interested him. In his view it will be team projects, controlled by the group within the bounds of company standards, that will give the firm viability in the future.

This fits with Drucker's (1993: 46) notion of knowledge:

The knowledge we now consider knowledge proves itself in action. What we now mean by knowledge is information effective in action, information focused on results. These results are seen outside the person - in society and economy, or in the advancement of knowledge itself. (author's emphasis)

Team assessment builds on the notion of collective expertise put forward by theorists, who have redefined knowledge within the context of globalised fast capitalism:

The business world, as part and parcel of massive global economic, technological, and social change, now sees knowledge as its primary 'value'. Contemporary, global competitive businesses don't any longer really compete on the basis of their products and services per se. They compete, rather, on the basis of how much learning and knowledge they can use as leverage in order to expeditiously invent, produce, distribute and market their goods and services, as well as to innovatively vary and customise them. Such knowledge is made up of both highly technical components and components dealing with communication, motivation and social interaction. (Gee et al, 1996: 5)

Based on these values, relevant industry training is primarily concerned with providing resources and support in work projects that are problem-based and contextualised. Such training defines the outcome within the context, but leaves the trainees free to explore the options and to generate knowledge to deal with issues concerned with people and the practical. The trainer's role is one of facilitation. The outcome and hence the assessment is a group achievement.

To us, the Manfred trainers, team assessment and training reflected the legitimacy of real workplace practice. The trainees and the management named the learning as team experience. The achievement did not belong to the individuals. One Mancart team leader remarked:

Leadership is not about the leader. Leading is about putting the whole group together to work together.

Team training and assessment fits with Gee's notion of a community of practice, where knowledge and work practices are located within the company culture rather than within the individual:
Tacit, extensive, distributed, dispersed knowledge, dynamically developed in a coordinated network of people, tools and technologies serving multiple, integrated and overlapping functions - that is what I mean by a community of practice ... people are bonded to each other only secondarily through their primary cognitive and affective allegiances to the practice. When the practice changes the teams change. The community of practice is like an organism that is not identified by its ever growing and dying cells (team members), but by the trajectory through space and time of its efforts and endeavours - its ever changing and improving practice. (Gee, 1997: 79)

Our task as trainers then is to identify the community of practice, to name it and find learning opportunities to share and extend it. Contrary to ‘scientific’ approaches, every attempt was made within the Manfred project to observe the way values were embedded in facts, and the means influenced the ends. Trainees needed to recognise that engineers were expressing the Manfred identity in the vehicles they designed. Their billy carts needed to respond in a similar way to a different market. Team members needed to determine excellence within a subjective context. The quality of relationships within the team would fuel the creative and practical energies of the group to achieve the best cart.

The context and the team were therefore central in our assessments. Individual assessment is imposed by outside forces to indicate a learner’s ability to meet a minimum generic set of criteria. Team-based enterprise-context assessment judges achievement on internally negotiated criteria. The assessment indicates the ability of the group to achieve a collective competence that exceeds their individual competences combined. One form of assessment is closed and finite. The other is contextually bound, self-analysing and ongoing. One has transparent and limited criteria. The other has changing and adaptive criteria. One is focused on the demonstrated duplication of skills, the other on strategic competence and the ability to achieve synergy. Team-based assessment fits with the knowledge economy referred to by Gee et al (1997). It appears to be the way of the future.

This is not to say that there is no place for individual skills and assessment, but we defined our project in different terms. This program needed to address workplace change and the uncharted ‘competencies’. To stimulate change in behaviour and perception, we needed to concentrate on identity - that of the group and the company, and the relationship between them.

Should we therefore conclude that this company has abandoned the scientific orthodoxy of industry? It is not so simple. Many areas of the company activity remain highly controlled and ‘scientific’. Quality is one such area, but there is also an affective aspect to quality management. Quality depends upon a set of shared values, a continuous striving for improvement. It includes caring about production, being involved, sharing information and skills, as well as objective measurement. It is a cultural, company-wide endeavour as well as a ‘scientific’ activity. It is that part of new capitalism that asks employees to offer not only their labour, but also a part of their identity. The scientific discourse has not gone away, but it now sits alongside and sometimes competes with the discourse of globalism and managerialism. Issues
of worker identity and commitment emanate from the discourse of the new workplace:

The corporate designers of the new organisational structures know ... that these new structures will not succeed without the creation of a culture of feeling, attitudes, beliefs, habits and behaviour that correspond with the forms of organisation embodied in the new structures ... It (the new culture) seeks also to eliminate the allegiance of employees to external solidarity forms in the remnants of class and union formations. (Casey cited by O'Connor, 1995: 75)

The building of trust, mutual support, loyalty and pride is of great interest to Manfred management. The managing director is frustrated by the fact that few shopfloor employees are willing to join the social club. He wants the company identity to override the class divide.

Manfred employees are expected to act as ambassadors for their company in their interaction with the public. The company held an open day recently, at which employees (shopfloor and office) guided groups around the factory and answered questions about the displays of technical wizardry on show. It was hoped that they would express pride in the company's achievements and volunteer at least part of their Sunday to attend. Another group of shopfloor employees went to Queensland to work with a group of Aboriginal children building billy carts - a project that emerged as an unexpected consequence of the training program. Once again, their role as company ambassadors was established in their thinking; not overtly, but each individual understood that they were carrying the good name of the company on their badged hats and t-shirts and in their behaviour.

The recent Ford badge reads 'Ford. Live it!' The Nike managing director, when interviewed on the radio, recently declared with enthusiasm 'Nike, it's a way of life!' This is the nature of modern everyday work - yours and ours as well as that of Ford and Manfred.

And what's it about? It's about identity, commitment and control;

... the presence of a strong culture and shared internalised values provide control and co-ordination in place of authority relations and direct supervision. Most of the control processes are consenting and unobtrusive. (Deetz, 1995: 147)

Manfred looks forward to the day when supervisors will no longer be employed on the shopfloor. Teams will be self-managing and sufficiently enculturated to understand the company values and the community of practice, in order to act in concert with the company ethos without conscious forethought. It is therefore not surprising that the company values team assessment.
If we probe the ideology that underpinned our team assessment, we would find that:

- group endeavour overshadows individual contribution
- training and assessment experiences closely reflect authentic workplace processes

If we overlay this with the primary role taken by company personnel in training and assessment, we can further elucidate the ideology behind their involvement:

- the company objectives are borne out in the judgements of enculturated members of the company
- company values and ethos are modelled in the work processes
- training achievements are showcased, demonstrating the mastered level of company consistency

The dynamics of the company’s ownership of training is further played out in their role as assessors and contributors:

- the involvement of office employees gives them a stake in shopfloor training
- training is legitimated and acclaimed as significant by management involvement
- the contribution of certain trainees is observed by management, particularly those taking leadership roles

In short, we are dealing with an important tool for enculturation:

Limerick and Cunnington (1993: 114-119) describe a process of collaborative individualism where the relationship workers develop in the team is a commitment to the collaborative mission of the central agency. Individuals collaborate with each other primarily through agreement of values related to the mission. Their relationship (and therefore mobility) within the organisation is negotiative on their commitment. This thesis dovetails with the Post Fordist concept of perpetual adaptability and with the premise of enterprise bargaining. (Torns, 1995: 57)

The process is therefore neither bland nor benign. It places industry teachers in the invidious position of being tools of company enculturation. Where education is meant to be emancipatory, instrumental in exploring and expanding one’s personal identity and capacity, here education is about shaping and pruning the identity to fit a company mould.

But then, let us not be naive. Foucault, and more recently Fairclough (1989), laid bare the processes by which education functions as a most effective moral, social and political enculturation. Participation within the education system, let alone success, demands submission to its values.

Objective assessment *pretends* the impartiality of science. It is supposed to demonstrate authenticity, reliability, fairness and validity, but who makes those decisions? They will probably vary with gender (Jackson, 1991) or with ethnicity (Mawer and Field, 1995) or social class. Edelsky (1991) has demonstrated parallels between literacy and mathematics scores and family income levels in American
primary schools. The unpalatable fact is that any judgement of assessment sits within a discourse and can only have recourse to validity within that culture. Pretending objectivity leaves teachers and students vulnerable to exploitation through self-deception.

Therefore 'objectivity' is not the problem, but 'whose subjectivity' is!

The culture of the company represents the powerful dominant discourse. Employees who wish to be successful need to reconcile themselves with it sufficiently to survive. Training programs should encourage trainees to contest the values, but should also show how to make such values work for them.

Our program at Manfred helped learners to locate where and how the powerful decisions were made, and to build the networks that allowed them to interact with key communicators. It attempted to make the culture more apparent and to find a pathway for shopfloor employees to enter it.

Fortunately at Manfred, the management takes a radical, humanist approach to labour management. It encourages educational endeavour among employees and rejects mechanistic, minimalist training. While it expects commitment and company identification, it expresses a belief in the capacity and integrity of its employees. It seeks to offer an accessible, caring management willing to listen and support individuals and to find opportunities for them to be creative and express initiative. While it is not all joy and light, the company is striving for a better world for its employees, as well as a secure level of profitability.

Blessed by the power of globalism, we have moved into the age of the enterprise. Systems for national control of training, industrial relations, wages and even markets are breaking down. We (companies, educators and communities) are told this is the pathway to economic survival, and it appears that we have no choice. The ANTA Training Packages have provided the training response that allows the enterprise to define its needs in terms of its own cultural interpretation of knowledge, skill and opportunity. Most enterprises have moved to a team-based organisational structure, whether autonomous or not, but have still maintained a focus on the individual for training and assessment. This paper argues that workplace endeavour is better contextualised at the level of team, where expertise is collaborative and outcomes are collective. If this is the case, then team training and assessment has to at least gain parity with individual training and assessment, as an authentic reflection of real workplace skills. As a powerful and therefore dangerous tool for company enculturation, questions of integrity arise for both educators and trainees, but we need to acknowledge that these questions have always been there. Maybe the new system will confront us with issues we have skirted around in the past.
References


Developing team leadership and entrepreneurship using holistic methodologies

Martin Guedalla
University of Westminster

Professor Mike Armer
Florida State University

Jenny Hooper and Peta Bush
University of Westminster

The following paper is an examination of the notion of entrepreneurship via an alternative methodology of action learning in higher education, based on a dynamic team leadership model (KUBUS®). We also discuss a three-year analysis of the outcomes of applying this model with a cohort of students. Building on such concepts as 'confidence, ambiguity and delegation/employment', we highlight the poverty of conventional notions of the entrepreneur and the need to develop training in such knowledge and skills. However, we recommend that this is only possible by utilising the skills of educators who themselves are working in teams.

There has been much debate on what entrepreneurship might mean in the context of the United Kingdom, and whether or not it is an appropriate subject in higher education. If we add to that issues concerned with leadership, we would be quickly categorised as being associated with a 'vocational' university, rather than an 'academic' one. For the purposes of this paper, we will derive our concept of the vocational university from the work of Professor Gibbs (1993) and other work that has been carried out in higher education. Rather than using variations of 'talk and chalk', we will be examining delivery and learning via an alternative methodology: of action learning in the context of higher education (McGill and Beaty, 1995; Pedler, 1991).

We will also develop product as well as process skills and knowledge in an action learning environment. As part of the process side of the methodology, we emphasise and train participants to work in teams and develop networks. In courses developed for this particular clientele, we use a model based on a form of ethical and social entrepreneurship, where social is essentially defined as: '... joint efforts by various social players to stimulate employment through the creation of small businesses' (Pierre-Andre, 1998). This is based on European and Asian concepts which are often ignored by the Anglo-Saxon world, even though, pragmatically, their content is just as important in the global environment. In the Anglo-Saxon world, the concept of the entrepreneur is somewhat different. It is usually based on a notion of 'market forces' and deregulation, as opposed to 'the social market' and a more regulated system in Europe. In much of Europe, the tax and benefit system also works against small business start-ups.
Teamworking: some international perspectives

Team leadership is a much-maligned concept used by many in contexts that often obscure its contradictions. We attempt to differentiate it from other practices in terms of its context. Our work has covered such groups as those working in large profit-making organisations, non-profit-making organisations, small businesses, community groups, students in higher education and those sponsored by the European Social Fund (ESF). Before we can proceed, concepts of team leadership and entrepreneurship have to be unpicked and clarified in each context, so that the stated goals can be achieved by taking the team forward in a self-reflective way. This means that team members can use the tools and skills learnt in future scenarios on their own.

The initial catalyst for this work was based on a dynamic team leadership model originally developed by Professor Henrik Herlau of the Copenhagen Business School. This has been used in Denmark in both the profit and non-profit-making sectors of the economy. In the United Kingdom, it has been refined and developed to work with women returners, refugees and other knowledge workers (those with either high qualifications or business experience), as well as MBA students. Using the KUBUS® methodology, a team of eight has been compiled to deliver this action learning program.

The KUBUS® model rests on a number of holistic but discrete elements, including leadership, team development, networking, market research and project management. The first two elements might be categorised under ‘psychology’ and process, requiring self-reflection, feedback and confidence development, whereas the others are all learned skills and acquired knowledge. This self-reflection and objectification of the world is an essential element in producing successful results. We firmly oppose the concept of the ‘entrepreneurial gene’.

If we accept that the future will be based on concepts of continuous change, we seek to develop a model with a fixed skeleton but a different flesh for specific contexts. This upside-down thinking was inspired by the work of Charles Handy and others. The type of new jobs we are looking at are of junior to middle manager level and involve continuous learning, often in a team-based environment with a conductor-style of leadership. This means that we have to learn how to follow as well as lead and to be highly productive, focused and objective in our work.

Social entrepreneurship

As we have noted, the concept of entrepreneurship can be interpreted in many ways. This differentiation is further enhanced when the cultural context is taken into account. We are simply going to look at the notion of ‘social entrepreneurship’, to underline the different ‘ways of seeing’ this demonstrates. We have found this context most rewarding, in terms of increased productivity, motivation and innovation.

There have been a number of studies on what might be termed local or community initiatives (eg. Blakeley, 1994; Dionne, 1989; Shapero, 1984). In these studies, social is essentially defined as ‘... joint efforts by various social players to stimulate employment through the creation of small businesses’ (Pierre-André, 1998). Here we are looking at the overlapping areas of commitment of the individual, the local
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community and the wider community. This might mean the state or national government, or even such entities as the European Union or other regional groupings.

However, the concept of social entrepreneurship may also be interpreted as 'a non-profit making venture centred on developing the community, for the community and eventually by the community' (Guedalla et al, 1997). This is far more specific, as it explicitly refers to a non-profit making organisation which will at some point be taken over by its immediate community. It follows in the tradition of the self-help movement developed by the Quakers over the last two centuries, although in practice, it often seems to require an 'outsider' to act as a catalyst. It is very similar to any small business start-up initially, but funding is often obtained through charities, the state or specific publicly funded policy initiatives.

In the above example, the local community could be businesses, banks, trade unions, employer organisations, non-profit making organisations or individuals who wish to assist.

In our experience, churches often have a part to play in that the clergy have become adept at using their ethical position in obtaining funding to progress local schemes, which can sometimes reach enormous proportions. For example, Father Miles Kavenagh of Belfast has raised over £15 million sterling to develop houses, shops, education facilities and start-up funding for small businesses, thereby engaging the Protestant and Catholic communities. A similar venture in an earlier state of development was initiated and run by Father Xavier in Madras. This was aimed at developing new jobs in areas of high unemployment. Local businesses, state government and educational establishments were all involved in the schemes, and a college materialised from his vision for self-development.

An example in the United Kingdom would be Father John Symonds of Nottingham, who has combined central government funds with European schemes for local youth development, whilst working with the Prince's Trust to mentor the embryo
businesses. As an individual, the entrepreneur here is seen to be aloof from the profit-making culture, adding certain credibility to the work.

In these examples, social entrepreneurship is therefore strongly associated with an individual initially, and then the organisation they develop to further the aims of local regeneration. What is actually created from these organisations are usually self-sustaining, profit-making centres, but the transmission belt for initial and continual funding is itself a non-profit-making organisation.

In other parts of Europe, particularly in the Scandinavian counties, Ireland and Spain, the idea of community development is rooted deep in cultures spanning centuries, and is financially supported by the state and the educational system. The outcomes can be profit and/or non-profit schemes, as long as new opportunities and jobs are created.

As originally developed by Professor Henrik Herlau of the Copenhagen Business School, the concept has also been used in the sense of ‘group entrepreneurship’. In this sense, it meant the coming together of disparate unemployed individuals with different life and professional qualifications. After specific rule-governed training, these individuals developed new potential job creation schemes based on the needs of their local community. These new ideas were ‘social’ in that they emerged from team development. This concept could be adapted to the workplace, where staff employed either in a single department or across separate business functions could be trained to work in teams, with the objective of developing feasible innovative products or services for their company.

**Skeleton and skin**

The basic skeleton we use is similar in all market sectors. Here we are referring to external work with profit and non-profit-making organisations, as well as cohorts of students paid for through the European Social Fund (ESF).

We have a range of indices to check off in a matrix format against the type of organisation we are involved with. These include the more quantitative indices such as available resources and business skills, research input, networking contacts and achievable goals. The more qualitative indices would be levels of confidence, leadership, formal/informal hierarchies, group norms, communication skills and choice of membership. There are clearly a myriad of different roles, Gestalts, achievable outcomes, cultures and motivations involved in these different client groups. However, this dynamic skeleton can be used in its standing walking, running, jumping or sitting positions. We also change its position consciously as the courses proceed. Like a driver who becomes experienced, after a time the groups learn to change the position and adapt its strengths for their own purposes. From being exposed to a puppet on a string that assists them in their process, if the process works well, they become the puppeteers.

In addition, regardless of the sector the client group comes from, no two groups are ever the same; in this sense, they always add their own flesh to the skeleton. At the beginning of any course, no one knows how that flesh will look by the end. This mirrors our life experiences; no one can foretell the future in detail, even though we all have certain expectations. This truth holds for staff and students and is therefore
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risky for all. This is not the standard approach taken by those in higher education, and can be seen as inherently unstable and uncontrollable. Yet, in the current climate of western economies of continuous change, innovation, project working and lifetime learning, students and staff engaged in this type of work view it as a relevant and ultimately enjoyable form of learning. However, it must be added that both ‘sides’ select themselves for this type of journey.

Finally, we are always aware that there is a myriad of occasions where it is important NOT to work as a team, but rather as individuals. Much time can be wasted and frustration can increase if teams are always regarded as appropriate. The art of leadership is to identify when a team is necessary to progress towards the stated goals and when it is not. Robbins and Finley (1997) have also considered this.

Some results

We are now about to examine some results taken from our ESF cohorts. We have been running this course for three years now, in specific communities external to our university. We give students small questionnaires prior to the start of the 20-30 week course, halfway through it and at the end. We hold focus-type group discussions with them in the first few weeks and again on completion. We follow them up continuously so that our ‘results’ continue to improve over time, although this must be treated with some caution, even if participants attribute their ‘success’ to the course. The vast majority of the work is videotaped, analysed by the facilitators and fed back to the students for comment. Each student produces a two-week reflective logbook based on a critical analysis of their work in the context of their team, using texts and articles as reference points.

We admit 24 students into each course, which they attend for two days a week from 10am to 4pm, although they may be working many more hours than this towards the end, when their team project is developing. We have evidence from seven courses or 168 students, with data from three more courses forthcoming.

From this data, we have become convinced that important elements in the process include increasing confidence, awareness of the self and ‘other’ Gestalts, ability to lead and active listening skills. We might refer to the other important elements as the ‘hard’ business skills, such as marketing or financial control. It should also be remembered that although the vast majority of these participants (89%) have at least a first degree and/or good business/management experience, they come from enormously varied cultural backgrounds. We have had students from Bosnia, Canada, China, France, Germany, India, Ireland, Ivory Coast, Kenya, Nigeria, Pakistan, the Philippines, South Korea, Spain, Sweden, Taiwan, Turkey and the United Kingdom. This cultural diversity brings problems and opportunities, as does the fact that they are unemployed when they begin the course. Unemployment may have been voluntary, in the case of women returners, or forced, perhaps through redundancy or refugee status.

In any case, these students tend to lack the group norms that are expected in the paid workforce. Examples of such norms include acceptance of a formal hierarchy, set goals, imposed leadership, timeliness of meetings and understanding of acceptable excuses for absence or failure to achieve agreed actions. Students may also be
unfamiliar with a number of the usual team activities that take place in the paid working environment, such as minute-taking, acting upon decisions, task allocation, follow-up between meetings, etc. Again, this has to be relearned in a voluntary environment based on informal leadership skills that are difficult to employ, but if successful, can be put to advantage later in the paid work environment. These acquired aptitudes are also applicable in the large organisation (entrepreneurship), as well as in networking the small or developing organisation.

A breakdown of statistics from ongoing longitudinal studies show that students fall into the following categories:

- 11% are single parents
- 19% are 23-30 years of age or below, 55% are between 31-40, 16% are 41-50 and 10% are 50 or above
- 42% are men and 58% women
- 84% are at least graduates
- the period out of work prior to undertaking the course ranges from 0-8 years, with a mean of 18 months
- only 28% are born in the United Kingdom

Previous occupations include mother, secretary, cleaner, managing director of a medium-sized firm, actor, dancer, teacher, marketing executive, researcher, social worker, nurse and accountant.

Our current results indicate that 38% have gained employment at the level they deemed appropriate, 18% have made their own jobs (in the community or own business), 12% are pursuing further education, 19% have left for personal reasons and 8% are actively looking for work. Some of the personal reasons cited include going back to their country of origin, finding the course inappropriate and deciding to remain carers. We have lost contact with 5%.

There is no significant correlation on these courses between gender, age or country of origin and creating or making jobs. Initial motivation and an increase in confidence between the beginning and the end of the course are important. As we predicted in advance, confidence levels almost universally fall between the one-third and halfway marks of the course. We always warn students of this, as we base our work on action learning techniques, concentrating hard on critical analysis and communication skills. Again, the metaphor can be similar to that of learning to drive a car.

It should also be pointed out that one explanation for our apparent success could be quite external to the content and methodology of the course. We are well aware of the implications of the Hawthorn Experiment and are attempting to see if we can devise a system to screen this out of our statistics. However, to play the devil's advocate, it should be stated that we do have a high staff to student ratio; there is a minimum of three per cohort of 24, with additional members brought in for specific purposes. Each student costs around £2,400, which is by far in excess of other courses with the same objectives but different delivery styles. Thus, we would agree that the jury is out on what are the most significant variables, but we are working to devise more precise analytical tools to unpack these issues.
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Some tentative conclusions

It is apparent that we do not greatly support the work of Belbin (1981, 1985). Although we do not wish to devalue her analytic work, we are critical of her failure to consider cultural context (as has been stated many times) and for fixing her definitions on psychological tests that seek to categorise types in isolation from their social milieu. The practice of team building in an entrepreneurial environment is complicated and contains many variables, which is why teams so often fail. We have a long way to go before we can link personality types with this social context, but we do have to recognise that it is possible to change these 'solid' types when new Gestalts are introduced. That is not to say that a complete reversal is possible. Residues will always be important. However, if we consider the goals, internal skills and knowledge of those who chose membership, and all the other points we have raised, then we are able to more closely approach achieving our original stated aims.

Like any organisation, large or small, we now live in an era where nothing remains static. For the organisation to continue its journey successfully, these goals have to be reviewed and consciously developed.

Acknowledgements

We are grateful to the European Social Fund for funding some of our KUBUS® work.

References


Alternative applications
Cross-organisational planning and change management teams: an emerging dynamic in the vocational education and training sector

Chris Horton and Janet Osborne
Wodonga Institute of TAFE

This paper explores the issues, concepts and context associated with teamwork practices that have emerged at the Wodonga Institute of TAFE. It is suggested that these new forms of teamwork are necessary for successful change management in the emerging competitive environment of vocational education and training provision. The Institute's evolving practice in strategic planning and change management over a three-year period is also examined. Critical forces are identified in the internal and external environments, and organisational responses are mapped and related to the broader experience of service organisations and current theories of leadership and decision-making.

Context

Wodonga Institute of commenced business in 1987 with 24 staff and a few hundred students. That year, it delivered 184,000 student contact hours (SCH) of training. Just ten years later, the Institute delivered in excess of two million SCH to more than 13,000 students, with the support of nearly 350 staff. In an increasingly competitive environment, this period of sustained growth and achievement has engendered a sense of shared pride and ownership within the organisation. This demonstrates a culture of relative optimism in a sector that can be more broadly characterised as experiencing a crisis of confidence and identity since the early 1990s.

Accompanying this growth, however, has been the increasingly uncomfortable feeling that not everything fits or is coherent, either with the vision or with our approach to the vocational education and training (VET) business. How are we using our experience - personal, organisational and cultural - to inform our judgments about the future and our role within it? What sort of organisational shape works best in the corporatised and bipolar environment of the public educational provider developing substantial commercial contracts?

We begin our paper from this perspective. Our organisation has a relatively short history, with no major industrial relations difficulties or upheavals, no forced and unhappy mergers and no notably uncomfortable relationships with competitors as yet. We have set out to achieve greater flexibility in decision-making and staff use, acknowledging the rigidities that attach to our thinking and practice through our public sector/technical school inheritance (see Horton et al, 1997).

The Victorian State Training System (STS) within which we function is also changing. The promises it makes are fewer and it now deals with a whole range of agencies including TAFEs, the adult education sector, private providers and higher education institutions. The central administration has been undergoing some radical thinking to try to help operators within the system and the STS itself make better
judgments about the future. Last year, staff within the Office of Training and Further Education (OTFE) began to use scenario planning as a tool for talking about the future more effectively, and to help providers within the system gain exposure to new ways of thinking (State Training Board, 1998). While this approach to planning and the associated processes has yet to receive wide exposure and acceptance in the VET sector, the change has been transformational for Wodonga TAFE.

In parallel with the STS planners, and sharing ideas in the process, Wodonga began to develop scenarios for itself and use them to produce a new strategic vision, identification of mission, statement of values and strategic direction. Over the past twelve months, awareness of planning as a pro-active tool at the operational level within the Institute has been noticeable. The language of planning and business development has changed. Departments are holding staff planning days, with structured discussions about the goals and vision of the department. Staff are articulating their experience and using it to inform planning and address customer service and marketing issues, forming genuine knowledge about their part of the business through day-to-day work activities and client familiarity.

The planning function

The focus on planning within the Wodonga Institute of TAFE is partly a feature of its location on the Victoria-NSW state border, within the political and administrative context of two cities identified since 1975 as a regional development area. Establishing a TAFE college in Wodonga in 1987 entailed the determination of operational scope and boundaries in relation to existing interests and activities of the Riverina College (now Institute) of TAFE in Albury, and the TAFE College in Wangaratta (now a campus of the Goulburn Ovens Institute of TAFE). In 1994, the previous consultative arrangements were restructured following a project that evaluated regional training needs and proposed a series of recommendations to the local providers and their respective state systems covering regional planning arrangements, market research and training delivery issues.

The report (Walpole, 1994) was followed in 1995 by funding for the implementation of a joint regional planning system designed to provide a better range and scope of vocational training options for the North-East and Border region. A local proposal for the Wodonga and Wangaratta TAFEs to explore the possibility of a partnership or merger in the context of cross-border developments suddenly became a Ministerial Committee (Kennedy, 1996) that proposed a three-way amalgamation of the existing Goulburn Valley, Wangaratta and Wodonga Institutes. After four months of rapidly shifting allegiances, regional model-building, political interventions and assault and counter-assault on arguments and evidence, Wangaratta TAFE was drafted into the new Goulburn Ovens Institute. The committee took the future of the Wodonga Institute in its own hands, indicating that this future 'lay to the north'.

The formal outcomes of this highly energised process were: (i) internal acknowledgment of the value of good planning and research functions to support the political, marketing and PR functions that ensure survival, and (ii) completion of a Memorandum of Understanding (MOU) with Riverina Institute of TAFE, signed by both State Ministers, setting out the principles of cooperative planning and service
development across the border. These political processes and outcomes enhanced the perceived value of good internal planning processes and the team structure and resources that had secured them. They also delivered a period of relative relief from external pressures, during which the Institute could do some real business planning.

**Figure 1: Planning interventions along the change continuum**
A convergence of forces

The period seen as the most critical for the identification and development of the new forms of teamwork practice (1995-98) is therefore characterised by strong internal forces and a series of external events which heightened the impetus for change.

These underlying forces included a high rate of growth (in staff, students and variety of service activity) and demand for resource efficiencies. On the standard measures, from the baseline in 1994, growth in SCH averaged 24% for each of the following three years, for an annual growth in operating expenditure of 8.3%. By 1997, recurrent base funding (government allocated, non-competitive) stood at 56% of non-capital funding. For a public VET provider operating in the typically ‘thin’ markets of a regional centre, this represents a significant level of exposure to commercial risk.

Internally, this growth has been characterised by changes in the nature and frequency of recruitment and increased numbers of non-tenured staff (i.e. those employed on a fixed term, short-term, part-time, sessional, consulting or casual basis). This in turn has impacted on the operational systems, forms of communication and decision-making, and management requirements at all levels. Several operational divisions are now larger and more complex than the entire organisation was during its early years. Operational pressures for greater efficiencies and customer responsiveness encounter corporate systems not designed for the necessary speed or flexibility.

Other less organic factors have impacted on the operating environment of the Institute, mostly impelled by change at the state/policy/political level. These are illustrated in Figure 1, where the organisational change cycle is represented as a spiral moving through the broad time continuum around an axis of planning activities (the ‘plan-act-reflect’ process). Internal and external key events are shown within the orbit through which the organisation moves. The forces impacting most significantly on planning options and organisational change over the period are depicted in Table 1.
**Table 1: Environmental forces for change, 1994-99**

<table>
<thead>
<tr>
<th>Year</th>
<th>External forces</th>
<th>Internal forces</th>
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<tbody>
<tr>
<td>1994</td>
<td>Large contract to service Army apprentice training secured by Wodonga TAFE (about 20% of training effort).</td>
<td>Multi-institute planning mechanism (the Joint Provider unit) expanded to include the Albury campus of Riverina TAFE.</td>
</tr>
<tr>
<td>1995</td>
<td>State Training Board policy change sees recurrent funding base capped for all public providers.</td>
<td>Wodonga Institute establishes new strategic planning initiative. Planning Review Group appears in its first construction.</td>
</tr>
</tbody>
</table>
| 1997 | Following Ramler Committee Review, amalgamations occur:  
- 1995 - 28 TAFEs and 1 multi-sector university /TAFE provider,  
- 1998 - 14 TAFEs and 5 university /TAFE institutions | Wodonga TAFE refines and consolidates its research, planning and administrative structures with separation of management accountability and creation of Centre for Research, Planning and Development. |
| 1998 | New Apprenticeships program alters TAFE funding nationally. Wodonga’s Army contract is put to public tender, adding uncertainty regarding this key commercial client and major income source. | Director retires and new director is appointed. Extended transition phase highlights required structural and risk management changes. |
| 1999 | Changes to State government policies on traineeships, levels of profile funding and Institute performance measurement, likely to further erode funding predictability. | Institute Council adopts new organisation plan and structure, and implementation commences. New systems and management arrangements. Teamwork practice is extended. |

Institute addresses new forms of educational alliance/partnerships, including interstate (F)
Shaping the team

From 1995 onwards, the mechanism for setting out the organisational 'game plan' became the Planning Review Group (PRG). This has functioned variously as a think tank, a reference group, a 'ginger' group and a promotional team. It has had a developmental role, a mediating/gatekeeping role, a tactical role and a maintenance role. Its initial weakness has become a strength; it emerged and got on with a set of tasks before achieving its current formal legitimacy. It is therefore seen as active, flexible and at arm's length from more formal senior management structures.

Three people provide the PRG with its impetus and continuity: the Associate Director, Training Delivery, the Manager, Educational Development Services and the Development Officer (Planning). All three have been involved throughout the period of change on which this study focuses, and each could be characterised as a systems thinker with a 'what if?' approach. None of the three comes from a TAFE background, although each sees a convergence of professional and personal interests within the education/learning function. The PRG has an age spread and gender mix, and its members have three different cultures of origin (Australia, Scotland, New Zealand). All are fascinated by people and what they do, especially in the constructed settings that occur in organisational and learning groups.

A larger cross-organisational team has been formed and reformed around this small creative set, as key interventions and system developments have been required. As Figure 1 shows, forces within and outside the organisation have demanded action to maintain and develop the business and to sustain its independence, while keeping the major resource 'pipeline' from the State Training System clear, connected and pumping.

The PRG became strategically important because it provided a conceptual base, a support system, administrative and research capabilities, and an inclusive and responsive arena for debate and construction of strategic approaches. It could move freely across the landscape and engage with in-house, regional and state interests to determine what it needed to know and how it should proceed.

The PRG has had four highly active phases over the period 1995-98, indicated by the outcomes shown in Table 1 - particularly B, C, D and E. As the Institute has engaged in the more public and political aspects of the planning process, whether in staff and community consultations to produce its strategic vision and plans (1995 and 1997), or in interacting with major external change forces such as Ministerial Reviews (1996 and 1997) and cross-border initiatives (1994 and 1996), the PRG has been activated and its membership augmented to support the task. Around these periods of intense activity, the inner team has built up the systems, procedures and documentation to maintain and develop its role.

The core positions provide the structural and conceptual base and continuity required for the team, together with its executive and maintenance functions. If we liken the PRG to an organism within the larger organisational 'ecology', the core staff is the spine, providing shape and connecting the system to the Institute's brainstem and its life-support organs. In debriefing on the PRG's work to date, we have identified four characteristics that the core group provides to the system and its
The three core members work across vertical and horizontal organisational boundaries, sharing experience, perceptions and responsibilities to bring about change. A high degree of trust and loyalty has developed within this inner system, which is now consciously using its conceptual base and transformational understanding to resource the thinking, language, consultative processes and implementation of a major organisational review and restructure.
Teamwork and organisational change

Belbin's (1996: 105-107) observations about organisational evolution and the critical role of teamwork appear well matched to the Wodonga TAFE experience. Over the ten years of its organisational life, it has moved through the first two management models that Belbin identifies - the 'big fish' and the 'command and control' approaches - and is now exhibiting the limitations of this. The next evolutionary phase is interactive teamwork.

The PRG has provided the critical third type of teamwork experience necessary to make this transformational move. Whether they work well or not, organisations provide plenty of examples of operational teams and some use of strategic teams. Cross-functional teams occur less frequently and are often short-lived, because they are non-hierarchical, difficult to establish and legitimise and unfamiliar and uncomfortable in their early stages of existence. But the experience they provide, such as confronting existing hierarchies and perceptions of power, is vital to the conceptual shift and rescoping of organisational practice necessary to achieve the genuine transformation to interactive teamwork proposed by Belbin.

The pattern of change achieved so far at Wodonga TAFE indicates that we are partway along the teamwork/organisational change continuum, with a clear opportunity to move forward. Figure 2 represents the sequence of conceptual and organisational shifts required for this.

Figure 2: Emerging team practice and organisational change
Team learning and leadership - reflections on practice

By working at this cross-organisational team arrangement, several benefits have been achieved that either individual effort or conventional operational teams could not provide. From the sharing of a common experience of working together and reflecting on these individual and team experiences in different ways, we have come to new understandings and created new solutions. So what does this mean for us in the future and for the practice of teams in an organisation-wide sense?

Describing people who have achieved personal mastery, one of his five disciplines, Senge (1990: 142) says: 'They see current reality as an ally, not an enemy. They have learned how to perceive and work with forces of change rather than resist those forces. They are deeply inquisitive, committed to continually seeing reality more and more accurately. They feel connected to others and to life itself. Yet they sacrifice none of their uniqueness. They feel as if they are part of a larger creative process, which they can influence but cannot unilaterally control'.

In a way, this describes why the team-based approach to planning is taking hold in this organisation. The core team and some members of the larger cross-organisational teams have started to understand the cycles of planning and development not just as tasks, but as shared journeys. For each person, these journeys are different experiences with different outcomes. But the product and the learning we contribute to the organisation each time is enriching the organisation with new ideas and the confidence to persist through periods of team activity that can seem rather slow or barren.

Additionally, new forms and expressions of leadership and influence are emerging and being accommodated within the organisation, both from the PRG experience and from other forms of project-driven teamwork. Purpose-built task groups, working on product development and evaluation or trialing new delivery modes, require flexible patterns of management and resource use and ready acknowledgment of where the requisite skills and specialisms - including leadership - may lie.

This reflects experience in other types of organisations. Schein (1994: 298) argues that as organisations move towards more responsive, project-based structures, power and authority relationships shift and continue to shift. 'Respect for people and the amount of influence they exert will have more to do with their operational performance than with their formal rank, and hierarchy increasingly will be viewed as a necessary adjunct to organisational life rather than its prime principle'.

Teamwork of this kind also entails another of the five disciplines Senge talks about: building a shared vision. If a cross-organisational team can agree on issues and values about the organisational mission and vision, then there is a far stronger chance that it will be a vision and mission that the whole organisation can confidently identify with. 'Personal mastery is the bedrock for developing shared visions. This means not only personal vision, but also commitment to the truth and creative tension - the hallmarks of personal mastery. Shared vision can generate levels of creative tension that go far beyond individuals' 'comfort levels'. Those who
will contribute the most toward realising a lofty vision will be those who can ‘hold’ this creative tension: remain clear on the vision and continue to inquire into current reality’ (Senge, 1990: 211-212).

For us reflecting on our three years of involvement in a team, the creative tension is perhaps the most memorable aspect of the experience. How have we resolved differences, accommodated views different to our own and come to accept them as valid? How have different people from the organisation, moving in and out of the team, enriched and widened its discussion and thinking? How has this experience impacted on their individual repertoire of practice as managers, facilitators and team leaders? These questions have all begun to inform the ways we think about a whole range of problem-solving issues in our organisation, and about tackling the challenge of a consciously structured approach to team learning and organisational development.

Towards a learning organisation

It is a leap of vision and faith to contemplate the goal of a learning organisation still struggling to come to terms with its first major paradigm shift and deconstruction of its learned patterns of thought and control. But such a leap is necessary. And like the other change experiences we have worked through, the gulf won’t seem so wide from the other side.

As the basis of life and work within a regional VET provider, to some of us, the learning organisation has the compelling quality of historical necessity: what do we anticipate if we don’t or can’t make the leap? We can certainly expect a declining relevance within the national and global environment of providing and supporting learning opportunities, and probably poorer jobs at the limited service end of the business, as part of some narrow ‘educational franchise’ operation. We can also expect an educational service station, offering less and less of value to those regional centres, small and large, searching for connections to the kind of economic and educational opportunities that will sustain individual and community livelihood. Indeed, the experience of decay and collapse of non-adaptive educational organisations (see Horton, 1996) is too frequent and too obvious for any organisation to claim ‘It won’t happen to us’.

At present, a small group of planners in the VET sector are assessing the relevance of various models of learning organisation to the future of regional TAFE enterprises (see Kearns, 1998). As part of this assessment and for our own understanding and guidance, some members of the Educational Development Services team at Wodonga TAFE have constructed a model that attempts to describe and inform the interaction between some major concepts and zones of organisational activity. These concepts include:

- lifelong learning
- intellectual capital and social capital
- learning organisations and learning cities

The model is set against a background of the emerging socioeconomic and technological environment and the directions identified by various writers (Field and
Teamworking: some international perspectives

Ford, 1995; Kelleher and Griffey, 1996) regarding the concepts above. It is not just the concepts that we are exploring however, but the systems, processes and activities they impact on. The model focuses on the following key components of organisational activity:

- building the education enterprise - new modes of strategic thinking and business development
- managing intellectual capital – a new perspective on capability and resource measurement
- teamworking – where flatter, more adaptive structures and project-driven systems are bringing a new meaning and centrality to team building and learning

Figure 3: Teamwork and the learning organisation in the emerging operational TAFE context

Arising from the interaction of these features is a new set of business orientations, some of which are highlighted in the simplified model above. Typically, these are areas where the system must respond by reconstructing its goals, systems and use of resources. These include (at the interactive zones in the model):

A New forms of human resource planning and management, including investment and measurement of intellectual capital
B Integrative and collaborative strategies for regional and global business, requiring ‘new’ managers with a new vision and skills
C Adaptive systems to support flexible teams
Cross-organisational planning and change management

This analysis, and the organisational experiences and reflection that underpin it, are very much a 'work in progress'. Appropriately, then, we stop with much unresolved. We look forward to opportunities for critique and discussion that will help us to determine how to make our thinking more coherent, our practice more grounded in reliable values and inclusive of individual difference and diversity. 'Organisational cultures can be changed, not in the first place by training or education nor by the exercise of force, but by bringing about organizational transformation. The appropriate organization will in time create a culture of its own' (Belbin, 1996: 76).

References


Teamworking as a hostage negotiator

Peter Shanahan
South Australia Police

The success of negotiation in a policing context is reliant upon a team approach. Police services throughout Australia have employed a four-person approach to deal with incidents involving hostage taking or which have the potential for serious violence. This paper briefly details the role of the negotiation team and emphasises the importance of maintaining team integrity for the successful resolution of high-risk incidents.

Teamworking is viewed as an essential element of almost all operational policing practices. It is recognised as an element of police culture and as an essential ingredient in successful organisations that are flexible and responsive to the needs of both clients and employees. Effective teamworking is a feature of organisations that are restless with the status quo and actively curious and open to discovering new, improved ways of doing things. In his seminal work The Fifth Discipline, Senge (1990) has cited the ability to work as a team as one key element of a learning organisation. This paper is a consideration of teamworking in the policing context. The relationship of team working to police culture, the importance of teamworking in the organisational context and the workings of a police hostage negotiation team are examined.

Teamworking: part of police culture?

The idea of teamworking in police organisations is regarded as an essential tool in the resolution of operational incidents. Aside from the conscious effort to develop teamworking skills, the ethos of teamworking may be enhanced by police culture. Police have traditionally been seen as insular, close-knit and separate from the public, perceiving themselves as protectors of society. Is good teamworking a by-product of this cultural more? In Skolnick's (1966) analysis of police culture, he talks about the existence of a degree of isolation and solidarity; attributes that imply a common siege mentality. He suggests that police see themselves as making up the 'us' component of 'us and them'. As a result of this, police tend to befriend and rely upon other police who understand their view of the world. Chan (1997) has also discussed the combination of police culture and police work creating an environment (Gee et al, 1996; Schein, 1992) where police have a very different view of the 'real world'. This view of the 'real world' invites an 'us and them'.

Other aspects of police culture have been discussed that could influence the strong teamworking ethos that exists and is seen as such a necessary element of policing. Bolen (1990) lists a number of these characteristics of police culture, including:

- police officers consider themselves to be volunteers who have offered their services to the community by choice
- police officers have a culture of pride in the force as well as personal integrity (qualities which tend to be belittled)
• loyalty in the police service is very strong and can be seen to have positive connotations for the wellbeing of the organisation.

Palmer (1992: 116) considers the loyalty aspect of the police culture in terms of the esprit de corps of policing as 'one of the strongest and possibly underutilised positives of police organisations'. Loyalty has been identified as a common feature in all of the literary discourse regarding police culture. In the context of policing in the negative sense, the concept of loyalty is said to breed solidarity, secrecy and corruption (Fitzgerald, 1989; Manning, 1977; Reiner, 1992; Wood, 1997). In its most positive interpretation, loyalty is thought to provide support and be nurturing through membership in the police family and a commitment to teamworking (Macdonald, 1995; Nixon and Reynolds, 1996).

The idea of policing being a 'mission' and more than a job (Reiner, 1992) indicates the service commitment inherent in police culture. This commitment can be negatively translated as getting the job done at the expense of justice and the rule of law (Chan, 1997; Manning, 1977; Prenzler, 1997; Reiner, 1992; Skolnick, 1966). In the positive sense, getting the job done can be literally interpreted. Despite constant scrutiny and adversity, police culture is still able to maintain an ethos of helping and serving the community (Etter and Palmer, 1995; Palmer, 1992).

On the other hand, loyalty engenders trust. To a large extent, it is trust that allows teams to work well together, sometimes in life and death situations where there is no such luxury as the time to get to know the person with whom one is working. Nixon and Reynolds (1996: 56) have quoted the Cultural Survey Report for the New South Wales Police Service, saying that '...the strongest aspect of organisational culture was the enjoyment people gained from working in a team or workgroup'. This comment can be taken as a reflection of the value police place on working together, sharing experiences and having shared goals. Macdonald (1995: 228) talks of police regarding themselves as part of a big family, who are proud of their organisation and are particularly service-oriented.

To summarise, it seems that solidarity, loyalty and trust are cultural elements that may accentuate the ability of police to adapt to and successfully work as a team.

**Team learning as a corporate imperative**

'Teams, not individuals are the fundamental learning unit in modern organizations' (Senge, 1990: 10). The essence of team learning is founded upon the concept of true dialogue. True dialogue encourages the team to think together to achieve results not achievable by individuals alone. Senge describes this type of learning as the 'free flowing of meaning' through the collective creation of knowledge (p. 10). His analysis of team learning is opposed to the concept of team building, which encourages open personal communication and building spirit. Senge describes discourse as the catalyst that facilitates open inquiry and dialogue. Through such open inquiry and dialogue, learning can thrive. Dialogue is a central component of Marquardt's (1996) model of a learning organisation (a team can be considered as a micro learning organisation). According to Marquardt (1996), dialogue is communication of the highest quality, comprised of listening to and sharing information in order to create collective thinking (as an adjunct to team learning) and
as an aid in the identification of mental models that may stifle organisational learning. Dialogue is seen as ‘...the critical medium for connecting, inventing, and coordinating learning and action in the workplace’ (Marquardt, 1996: 46).

Team learning does not necessarily require a team to be free of conflict; it requires the team to share and appreciate the views of other team members, as well as recognise their talents or failings. If one was to look at an achievement-based analogy, the performances of an orchestra or sporting team could be described as comprised of more than just the sum of individual performances (Sofo, 1993: 25). Senge (1990) sees the role of the manager here as that of a steward or designer, as opposed to a charismatic hero who makes the key decisions. Team learning under astute stewardship, involving a cross-section of the organisation from the top to the bottom working together, gives a sense of the potent energy that can spread throughout the organisation. Understanding, proper communication, learning and adapting are essential requirements of both an organisation and a successful negotiation team.

Before specifically discussing the role of police hostage negotiators, it is important to look at a team of negotiators in context. As has been discussed, teamworking can be viewed as a cultural more or as an ideology; a commitment by management to improve an organisation through an increase in employee involvement (Marchington, 1997). On the other hand, teamworking can be seen as something that has evolved of necessity in order to cope with a task that could be impossible for an individual to deal with alone. The negotiation team has evolved from a combination of community expectation and the practical experience of dealing with potentially violent situations. Teamworking as a negotiator is seen as an essential element in achieving an end.

The following is a description of the context of negotiation in the South Australia Police, who use the four-person team system as a standard negotiation unit.

**Role of negotiators**

Over recent years, there has been a significant philosophical shift in emphasis with policing. In particular, the role of police as enforcers has given way to a policing paradigm of collaboration with other agencies, cooperation with the community and the use of what can be termed ‘softer option’ policing methods. In Australia, national guidelines exist that require the use of negotiators as a first option in any high-risk situation; where a person threatens suicide or where there is a perceived need for trained negotiators.

There is a pool of about 20 trained hostage negotiators in the South Australia Police. This pool is divided up into four teams who are on 24-hour call in seven-day blocks, every day of the year. Each team has a designated leader responsible for ensuring negotiator attendance at an incident is timely and appropriate. High-risk arrests, sieges and suicide intervention are the most common incidents dealt with by negotiators. The tools of trade used by negotiators in dealing with any of these incidents are the tongue and the team. The overall responsibility for an incident rests with the tactical commander (usually the person in charge of the Special Task and Rescue Force (STAR), who contains the scene). However, the make-up of the team
and the tactics and strategies employed to achieve the goal set by the tactical commander are determined by the negotiator team. Every negotiator in the South Australia Police has been trained for each of the four team-roles. A training day for negotiators is scheduled every two months and each team member must be prepared to perform the role that circumstances dictate.

**Role of the team**

The negotiator team is charged with the task of bringing about a peaceful and smooth resolution to an incident. The team is expected to know what to say and how best to say it, to diffuse a high-risk situation and diminish the likelihood of injury. In theory and reality, it is the very integrity of the team that enhances the possibility of a peaceful resolution to an incident. The integrity of the team is founded upon ownership of the negotiation process, a shared commitment to peaceful resolution and, most importantly, a strict adherence to the team role that is being performed by each individual. Each of these three elements are now explained in more detail.

Firstly, the team must own the negotiation process. Once the process of incident resolution has begun, negotiation must be left up to those who are trained to negotiate. The commander of an incident must maintain a strategic overview of all the connected parts operating to resolve the incident. With this strategic imperative in mind, each of the respective components of the commander's arsenal must be allowed to perform unhindered by unnecessary interference. They must each be allowed to own the process and be trusted to perform to the best of their capabilities when placed into the environment for which they have been trained. It is incumbent on a team leader to ensure that commanders do not negotiate and negotiators do not command.

Secondly, the team must share commitment to a peaceful resolution. Communication of the negotiation goals must be open and precise, so that the view of the commander is embraced and properly translated into action. If it is decided that other action is to be taken to resolve an incident (for example a tactical assault), then this too must be communicated to the negotiation team, so that appropriate tactics can be employed to complement the process.

Thirdly, it is vitally important that each team member knows their role and performs only those functions that lie within it. The roles in a negotiation team are quite specific and all are predicated on providing support to the process and the other team members. At a personal level, to be surrounded by professional operatives and to have the confidence to perform a specific role, without giving consideration to extraneous factors, breeds an environment that promotes the expected optimum performance. On the other hand, a lack of discipline in this area could lead to dire consequences, as the team is dealing with a situation of life and death in almost every negotiation. Godfrey (1993) talks of structure (in the broadest sense) as a more powerful determinant of outcomes than individuals ("structure determines behaviours"). In other words, if the structure is right, there is less likelihood of an individual error having a major effect on an outcome. On the other hand, if the structure is wrong, this will more likely have a detrimental effect on any outcome than individual error. This leads to the conclusion that if things go wrong, the
appropriate reaction is usually to examine and modify the structure, not to hunt for 'guilty parties'.

So what are the roles performed by a negotiator team? The four positions are team leader, primary negotiator, secondary negotiator and liaison officer.

Primary negotiator
Of the four roles, perhaps the most high profile and recognisable would be that of the primary negotiator. The primary negotiator is the conduit between the commander and subject of the incident. It is the responsibility of the primary negotiator to do all the talking to the subject. He or she must attempt to develop a rapport with the subject in order to calm or diffuse a high-risk situation, gain time so that strategic decisions can be made and plans implemented, and gather intelligence through the negotiation process.

Secondary negotiator
The primary negotiator is supported by the secondary. The secondary negotiator stays with the primary negotiator so that he or she is in a position to immediately take over negotiations if necessary. This person is responsible for the maintenance of running sheets and tape recordings, and most importantly, to act as a prompt or to communicate urgent information to the primary negotiator during the course of negotiations. The secondary negotiator must not only listen to all of the communications between the primary negotiator and subject, but make timely interruptions (without breaking the continuity of negotiations) in order to pass on important information or messages that must be conveyed to the subject.

Liaison officer
Both the primary and secondary negotiators are in turn supported by a liaison officer responsible for security of the negotiation cell, maintenance of equipment, liaison with intelligence officers, and other duties as required in support of the functions of the team leader. It is important to reiterate that any muddying of these roles has the potential to break the concentration of the primary negotiator, or cause even a small mistake that could affect the credibility of the primary negotiator and irrevocably compromise the process. It is a process where credibility and trust are two essential elements to a successfully negotiated resolution.

Team leader
The team leader is the central point around whom the team revolves around. The first responsibility of this team leader is to ensure that he or she is properly briefed on the incident by the commander and then to select and designate the team roles. This selection process must take into account the circumstances of the case and the individual strengths and weaknesses of each of the team members. It is incumbent upon the team leader to know her or his team so that the selection of roles is timely and appropriate. The team leader is then charged with the responsibility of the overall management of the team (the Senge (1990) concept of stewardship is probably an accurate description of the style of this management), ensuring that all team members are aware of the roles they must play and the importance of staying within those roles.

As well as managing his or her team, the team leader acts in concert with the tactical commander. This liaison is maintained through regular briefings and updates. The
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team leader is somewhat removed from the actual physical negotiation and is reliant upon the liaison officer to be kept updated on any nuances that may not be detected at that distance. However, the advantage of keeping some emotional distance from the actual negotiation is that it allows the team leader to be better able to:

- forecast predictable situations, particularly in the form of demands and dialogue
- request and assess intelligence
- arrange the attendance of supporting agents (such as psychologists or interpreters)
- manage the keeping of records.

One of the most important functions of the team leader is to monitor the stress levels and dynamics of both the team and subject of the negotiation. If stress levels are high or the negotiation loses direction, then a break in negotiations (down time) may need to be orchestrated so that team members can re-focus. It is during this down time that the primary and secondary negotiators can disengage from their subject, to absorb new information. It allows these primary and secondary negotiators to momentarily unwind, take a rest and some food and drink. Here, members of the team can communicate in a more focused and concentrated way. Communication within the privacy of the team will invariably involve a ventilation of feelings, clarification and review of what has happened, agreement on a strategy and the setting of realistic goals that are achievable within the next negotiation timeframe. This type of communication can be described as true dialogue.

In summary, the team leader must preserve the integrity of the team by being honest and clear in communication. Concomitantly, it is the responsibility of the entire team to provide support, to recognise good work and be constructive in reflecting upon the progress of the negotiation.

After the event

The process of reflection is critical to the maintenance of team cohesion. From the perspective of the negotiator, formal reflection on the conduct of the operation takes the form of debriefing. Training at both the domestic and national levels places great emphasis on the debrief as a means of allowing the pent-up emotion of the negotiation cell to be released, ensuring that the team can learn from the collective experience of the incident. The debrief is usually conducted by a police psychologist and provides an opportunity for decisions to be justified. For example, the team leader is able to dispassionately explain why she or he may have relieved the primary negotiator or swapped the secondary negotiator with the liaison officer. The debrief is a time when the work of the negotiation team is put into perspective and recognised as a part of a larger team operation, where all sections are dependent upon others for success. The debrief must be honest and provide an opportunity to learn from any mistakes that were made. According to Godfrey (1993), learning without mistakes is a contradiction in terms.
Conclusion

Hostage negotiation in the policing context mirrors processes employed in a progressive organisation with the ability to evolve and learn. The structure of the team and the discourse required to disseminate information are essential ingredients to place a team in a hostage-negotiation sense, and an organisation in a macro sense, in the best position to achieve a desired outcome. This paper has briefly explored the relationship between police culture and the ability to work well in teams. The importance of good teamworking in an organisational sense has also been examined, through the example of hostage negotiation in the South Australia Police. The importance of structure, honesty and commitment to the goals and process of the negotiation have been emphasised.

The negotiation process is complex and delicate. It is designed to control emotion and for intelligence to be gained from nuance and inflection. When a life may be in the balance, dealing with these intricacies highlights the importance of a cohesive and disciplined team, confident in its ability to perform and critically reflect on success and failure. This ability to critically reflect allows the performance of both the team and the individuals in the team to grow and improve.

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Discovering the InsideOut team

Tricia Hiley
Royal Melbourne Institute of Technology, Melbourne

This paper explores the concept of InsideOut Teams based on the reflections and insights of the participants involved and a very interested observer. I was the very interested observer. I go on to expand on how this concept and specific team process might be applied in business and academic settings to achieve profound learning and stimulate high quality achievements. This paper is not intended as an expert treatise on teamworking, but rather, as a description of a phenomenon and an initial exploration of the implications of the phenomenon for teams, particularly workplace teams. My hope is that it might encourage you to experience an InsideOut Team yourself.

The 'teacher's' story: the presenting issue

'There was something special about what happened. We had each worked in many different team situations in the past, but there was something that made this team different. It had a special energy that we had not experienced in teams often before and certainly not over such a sustained period of time. There was a sense of 'flow' that regenerated each time we met'.

What was different about this team?

I know that each member felt they left each meeting with more energy than they had when they entered. This is quite different to many of our team experiences. We had sometimes left team gatherings tired and flat, or at least with less energy than we had when we began. I think some of us had also experienced energy producing teams, but those teams had the expectation of common team goals and outputs. Each person in this team had an individual assignment, not a common report or project for implementation. This seemed to be backwards to many of the fundamentals of teams, which are more likely to have individual tasks being brought into the team to put together for a common output.

As director of a postgraduate program and supervisor to Masters students during their thesis research, I noticed that the writing of a thesis posed a major stumbling block for students. I spent much of my time attending to grammar, punctuation and sentence construction. I believed that an important part of mastery of their chosen discipline was being able to tell their story on paper in a reasonably intelligent and coherent manner. I needed to do something. My intentions were threefold: I wished to (1) help my students with the development of their writing skills, while (2) doing so in a manner consistent with our educational approach (see below), and (3) giving myself back some time to spend with them on other issues in their research.

We already used learning groups or syndicates as peer support teams and knew their benefits. I chose to change the focus of the peer support teams in the final Masters year, during which the thesis was written, to look specifically at student writing. With the wonderful magic of serendipity, the very day I was planning to
introduce this idea to my students, a visiting professor from an American university mentioned that he regularly participated in what he called a ‘writing cluster’! He considered it ‘essential’ to his writing. I listened and learned from our visitor. At our next gathering, my Masters students and I formed writing clusters similar to those he had described. Simply put, the guidelines I suggested were that:

- the purpose of each writing cluster was to give feedback and support to each person around their writing
- small groups (not more than four people) be formed
- members meet regularly
- each person have some of their writing reviewed at each meeting

We have now had 2.5 years experience with writing clusters. Some very interesting things have happened in the teams. This paper includes the story of one team’s experience and the impact of what we discovered. I conclude by looking at the possible implications of our findings for teams in general, but particularly workplace teams.

The program
To set the context, I’ll describe our program, educational approach and students.

Our content
Our program, Innovation and Service Management, is an articulated interdisciplinary program in the management of change. It is about seeing systems.

‘It is about overcoming System Blindness. It is about seeing our part in the context of the whole. It is about seeing the present in the context of the past. It is about seeing ourselves in relationship with others and creating satisfying and productive partnerships in these relationships. It is about seeing our systems’ processes in ways that enable us to create systems with extraordinary capacities for surviving and developing’. (Oshry, 1995)

Approach to learning

Learning environment
The program is conducted in an environment that encourages adult learning, taking into account the individual development needs and learning styles of students. Wherever possible, learning experiences are linked to past experiences, current issues and future needs of the students. Participants are expected to take an active role in directing their own learning and to use the time to expand it and reflect on and develop their own practice. Small learning groups support students in their work on specific tasks or assignments and assist in the development of cultural values, team building, consulting and negotiating skills.

Feedback
Staff and students are encouraged to work together to generate and act on feedback regarding the development of understanding and knowledge in relation to the expected learning outcomes, and how students have applied these learnings in their workplace practice.
Role of the academic staff
Academic staff provide assistance in exploring the subject areas by providing resources and inputs, setting assignments and learning activities, responding to student needs, facilitating individual and group learning and actively promoting an adult learning environment. We become participant learners, drawing on the knowledge, experience and learning of the group, including ourselves.

Our students
Our students are generally in full employment or run their own consulting practices. They range across many sectors of government and industry and all have numerous years of working experience.

So where did the InsideOut Team come from?
At the end of our first year using 'writing clusters', it became evident to a number of us that something very special had happened. I met with the members of one writing cluster, all of whom were interested in reflecting on the experience. The following is the story that emerged.

The learners' story
Our 'writing cluster' was one of several formed early in our Masters year. Two of us, Merry and Michael, had worked together in syndicates previously, but John was 'new'. There was little discussion or analysis about teaming up - it just felt right. We each had different backgrounds: in-house consultant for a large mining company, continuous improvement facilitator in a manufacturing environment and self-employed consultant with a background in human resources and documentation.

Our intention was to review our writing, submitting pieces on a regular basis and allocating a set time for the review of each person's work. The focus was to be on 'writing' - style, organisation, grammar and the like. This is how we started out, and on the surface, it seemed to be what we did throughout the year. We met frequently, not to a pre-determined schedule, but whenever we felt we needed to. We agreed on our focus for each meeting in advance, and then circulated some relevant writing to each other a couple of days beforehand. Meetings were always held in the evenings or weekends and lasted for about four hours. Allowing for a break or two, this gave us about an hour to spend on each person's work.

We soon realised that our meetings were going well beyond writing reviews and had extended to cover reviews of content, contributions of information, sharing of resources, joint development of ideas and sharing of feelings. On reflection, we realised we had each become a mixture of technical reviewer, shadow consultant, coach and confidant to the others. We had established a small learning community and achieved 'success' by completing our theses on time.

But there was something special about what happened. We had each worked in many different team situations in the past, but there was something that made this team different. It had a special energy that we had not experienced in teams often before, certainly not over such a sustained period of time. There was a sense of 'flow' that regenerated each time we met.
What was different about this team?
Some of the things we felt differentiated this team from others in which we had frequently worked were:

- each team member was working towards their own end-product, rather than working together towards a common result
- we had diverse backgrounds - different disciplines, industries and countries of birth
- we had a safe environment in which to work, free from interruptions and managerial or peer pressure
- there was genuine commitment throughout the duration of the group
- there was no competition between members
- we only met when we needed to
- each member contributed freely
- there didn’t appear to be any hidden agendas

What was special about this team?
There were also a number of aspects we felt were special about the team:

- feedback was intrinsic; we were all sensitive to giving and receiving it
- there was genuine openness and trust
- we experienced both joint development and co-creation of ideas
- feelings were shared
- we had a common grounding in Action Science, and discovered we constantly and unconsciously put this into practice
- we learned from each other - no parts of our meetings were wasted for any of us

Perhaps one of the most important contributions to our success was the size of the team. We felt three people were just right. The dynamics of the group allowed each of us to move between three roles: (1) giving intense feedback, (2) receiving that feedback and (3) observing and reflecting on the process. This was not pre-planned, but it is what happened, and we felt strongly that adding or subtracting from the size of the group may have jeopardised its chance of success.

Discovery of the InsideOut Team: an ‘AHA’ for all of us

When we sat down together to reflect on the experience, all four of us knew that this year’s experience with writing clusters had been very special. Our challenge was to reflect on what it might be that made it so special and how we could relate that to others outside the experience. The learners’ story I related earlier outlined the aspects that the team members felt made it special.

We knew that each member left each meeting with more energy than they had when they entered. This was quite different to most of our team experiences. With previous group experiences, we had sometimes left meetings tired and flat, or at least with less energy that we had when we began the meeting. I think some of us had also experienced energy-producing teams, but these had the expectation of common team outputs. We knew the writing cluster’s final output was three individual assignments, not a common report or project implementation. This
seemed backwards to the traditional idea of individual tasks being brought into the team to put together for a common output.

Our first breakthrough came when we realised the natural rhythm the three team members had developed. At each meeting, they naturally took turns: one was 'presenter' of their writing, one was 'consultant' to the presenter and one was the observer, who it turned out, was mostly reflecting on the links and relevance of the current discussion to their own work. This meant that everyone in the team had reason to be mentally present all the time. Was it as simple as that?

It took us several days of contemplation separately before the phone rang and InsideOut Team flowed through the air! AHA! That was it! It was as if, instead of absorbing energy and sucking individual effort into it, the team had been turned inside out and was producing energy to allow and encourage high quality individual effort to take place. It is the significance of this realisation to the classroom and the workplace that I wish to spend the rest of this paper discussing. But first, let us take a short trip to the literature. As a reader, I would like you to read the following section twice; first as it is, then replacing the word 'teacher' with 'manager' and the word student(s) with 'staff member(s)'. It may not be absolutely relevant in all occurrences, but stretch yourself a bit and ask 'I wonder whether it might be?'

'Evocative learning'

'Evocative learning is the kind of learning that results in 'AHA!' or even 'Eureka!' experiences. Teachers and students who exchange perspectives, use multi-sensory tools for learning and thinking and orient themselves toward real-life applications are likely to generate this type of learning.

One compelling outcome of inside-out teaching and learning is that students are more likely to become self-directed learners. When students discover that anything they are learning in school can be used to help them in their out-of-school life, they will want to learn more about the subject matter in order to have more tools for solving problems.

When you implement these instructional processes, you may notice more student competence, higher student self-esteem and better personal experiences of your own teaching. Your academic lessons may be more meaningful to your students, too. When you treat every lesson as a mind-expander that invites students to find creative applications for whatever they are learning, all academics subjects come alive.

Teachers and students can also receive at least one other welcome benefit when they use evocative learning procedures. Leff and Nevin (1997) have stated:

We have found that when students have more commitment to learning, more passion and excitement during lessons, and more creativity and ingenuity - as they typically do in evocative learning situations - both they and their teachers have more fun.

I believe in 'AHA!' experiences. Finding the book that contains the above quotation was one such experience. The four of us had experienced our 'AHA!' the previous week. 'InsideOut Teams' were on all of our lips. I was perusing books at a conference...
on ‘Educating for Multiple Intelligences’ when off the shelf jumped Turning Learning Inside Out. Leff and Nevin (1997) have beautifully expressed the concept of inside-out learning. It is the approach we aim for in our program and certainly what we have experienced over the year with regard to the impact of writing clusters as InsideOut Teams. So, the question becomes: ‘How do we apply this concept as teachers and learners? As managers and staff?’

Leff and Nevin suggest that inside-out teachers share a passion for ensuring students can use the academic content in real-life situations. They view students as their partners in designing and evaluating learning experiences. Being a good inside-out teacher means being willing to build on what students say is meaningful and what students say they need. The inside-out teacher is really a learner and inventor - progressively devising and modifying plans based on what students say and do. Leff and Nevin support my belief that inside-out teachers are indeed demonstrating a leadership process, showing new directions for education and business. As ‘teachers’, we have the opportunity to consider where InsideOut Teams might be used in our programs. Where might that special, sustained energy be worthwhile?

What do students experience? Learners as teachers! Leff and Nevin’s research supports our finding that students ‘teaching’ students has benefits for all concerned. It leads to increased understanding and use of subject material, increased self-esteem, acquisition of social interaction skills and increased self-acceptance / awareness and tolerance of others. Our InsideOut Team also experienced an energy ‘high’, a clarity of thinking and insights far beyond our expectations. We also had fun together. They seem like good enough reasons to give the idea a shot, don’t they?

Application in the workplace

My belief and growing experience is that InsideOut Teams are as appropriate and productive in the work setting as they are in an academic setting. My proposition is that there is excellent reason to introduce InsideOut Teams in workplaces. Reading the book Fifth Generation Management, I believe Charles Savage might agree.

Small, well-defined and well-staffed teams will meet with one another periodically to share their learning, insights, and challenges. We will cross-fertilise the efforts of one another. We will develop a rhythm of meeting which allows us to work on the particular, without losing sight of the larger context. And, as the team members work together and learn from one another, we will be refreshing and renewing our knowledge and visions. (Savage, 1990)

A little later, he continues:

The product of the effort embodies the thoughts and ideas of the process. The result is the expression - literally, ‘pressing out’. That which is inside us presses out. We give birth to new arrangements, new patterns, new conditions ... There is human engagement and expression in work, wonder and uncertainty, and a striving to give expression. As we press out these ideas in ourselves, the excitement of discovery, exploration, and accomplishment seasons our work experience.
But how? Why? Where? When? For insights regarding these questions, let's go back to the learners' story. What are the key elements? Most of the things the writing cluster members mentioned (as differences) are desirable in any 'high-performing team', although we may rarely participate in a team which has all those elements.

The 'difference that makes the difference'

One thing in the InsideOut Team stands out as significantly different from our experience of workplace teams in practice and in the literature. Ordinarily, a key element is a 'collective work product' or 'mutual accountability' in a product sense. For instance,

Real teams are deeply committed to their purpose, goals, and approach. High performance team members are also very committed to one another. Both understand that the wisdom of teams comes with a focus on collective work-products, personal growth, and performance results. However meaningful, 'team' is always a result of pursuing a demanding performance challenge. (Katzenbach and Smith, 1993)

In our writing clusters, each team member works toward his or her own individual end-product, rather than working together toward a common or collective result. In 'the learners' story', each member achieved his or her individual aims in good time, with excellent results. In the InsideOut Team, the 'mutual accountability' of product does not exist. Rather, members collaborate on process. Their 'mutual accountability' in process is what makes the InsideOut Team so special. Their 'performance challenge' is to sustain the process. Let's look at the list again:

1. Giving and receiving feedback
   In all of my evaluations of team performance, feedback was rated the lowest. In the InsideOut Team, participants' accountability to each other was PRIMARILY through giving feedback.

2. Being open and trusting
   The 'reason for being' was for us to be open to one another and ourselves, to listen to each other and trust the intent.

3. Co-creating and developing together
   Whilst the 'product' was individual and there was no original intent of joint development or co-creation, all members found great benefit from sharing their ideas in their different fields with one another.

4. Sharing feelings
   In other teams, the feelings of the members regarding any aspect of a process or product do not often make it to the surface. Once surfaced, feelings became a rich source of understanding and co-creation for the InsideOut Team. Energy didn't get diverted into attempts to hide members' feelings, leaving the energy free for other activities.

5. Practising Action Science and reflection
   The principles of Action Science (learning, internal commitment and the search for valid information) (Argyris, 1982, 1993; Hiley, 1995), reflective practice (Cherry,
1997; Schon, 1983) and the associated tools (eg. Ladder of Inference, Left Hand Column-Right Hand Column, Advocacy with Inquiry etc.) were essential elements of our practice. I believe that their use is critical for any successful InsideOut Team.

It’s easy to espouse the principles of inquiry and reflection, but more difficult to acquire and maintain a frame of mind which is always open to this type of learning. We gradually learnt to inquire into the sources of others’ views, to search for observable data before we began our interpreting and to regularly consider the assumptions on which we made meaning and inferences. We asked for illustrations, inquired into others’ responses and performed preliminary tests, to explore any inconsistencies. Through listening to their evaluations and attributions, we learnt others’ views about the observable data. The content of inquiries and responses, and the way they were crafted, provided important input to high performance.

6. Learning from each other

There was a learning orientation throughout, with an expectation that learning can and does take place anywhere, anytime. With the current interest in workplace, lifelong and organisational learning, it is not hard to transfer the relevance of this point.

While the number of members in the writing cluster was also cited as an important contributor to success, I think that the action of members to take on and rotate roles in the client/consultant/observer triad was more important for building and sustaining the energy in the group.

An essential question

An essential question is ‘Why do we have teams in the first place?’ As we set about developing teams in the workplace, it is important that we ask ourselves this question with rigour and regularity. We need to develop our ability to stay with that question (van Manen, 1990). What are the assumptions we are making? What do we think we will gain by ‘teamworking’? What are the guiding principles upon which we are organising our teams?

A conclusion of sorts

I am not suggesting that the InsideOut Team is better than, or should take the place of, any other form of team. I don’t believe teamworking is a ‘one size fits all’ prospect. Different guiding principles and desired outcomes will require different manifestations of teams. When considering teams in organisations, it is necessary to think about whether there are opportunities for the InsideOut Team, where the mutual accountability is in the process and whether the performance challenge is personal or interpersonal. If a desired outcome increases or improves individual (or personal) performance, with high quality outcomes, the InsideOut Team offers benefits worth the effort1 to willing individuals. Engaging in this process is indeed a real performance challenge! It may also be a ‘sleeper’ in developing the learning organisation that is so easily spoken of, but incredibly difficult to find in practice.

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1It’s hard work suspending our assumptions and judgements and truly listening to ‘an other’ in any sustained way. This is certainly not for the faint-hearted or unwilling!
Discovering the InsideOut team

My hope is that small groups of people might choose to gather and offer each other the opportunity to truly be listened to fully. That is, to be listened to thoughtfully, 'care'fully and meaningfully: to be deeply understood and respected. This, in itself, is a rare gift. To have this offered and to experience it regularly is a real energy high. When you reciprocate by listening openly and willingly in turn, it seems even better and more powerful. I suspect that there are individuals in all of your organisations (maybe even you!) who would be interested in achieving high performance outcomes, aided by the support of an InsideOut Team.

As the title of this paper suggests, I have mainly focused on the discovery of InsideOut Teams. We have discovered something that seems significant and is of interest to us. I see the opportunity for a lot more exploration. Have we 'discovered' a new life form in InsideOut Teams? In the end, this is not so much the question for us as whether or not the concept helps us to engage in meaningful dialogue. I hope you get as much fun and as much meaning from it as we have!

Acknowledgements

My sincere thanks to all my current and past students for allowing me to share in their learning adventures. Special thanks to the three people who shared, along with me, in the discovery of the InsideOut Team; John Vickerstaff, Michael Wale and Merry Cloutier.

References


Teamworking: some international perspectives


Teamworking: reality or myth?
Teams in contemporary manufacturing: some recent research findings and pressing questions

Rick Delbridge
Cardiff Business School, University of Wales

This paper discusses some recent research findings and considers some discrepancies in survey and case-study research of team working. In reflecting upon the social relations of teamworking and through a discussion of the exercise of peer pressure among team members, it is shown that workers are active agents in recognising and taking choices in how to act and interact. However, the scope of these choices and the nature of team working are considerably influenced by the organisational context of the team and the operating context of the organisation.

There are some inconsistencies in research findings with regard to certain outcomes associated with teamworking. While some industry-based surveys have reported clear positive results between teams and operational performance (Pil and MacDuffie, 1996), others have found a mixed picture (eg. Lowe et al, 1997). In addition, a number of surveys have found positive workforce outcomes as reported by management and/or trade union representatives, at least in some plants with teams (eg. Bacon and Blyton, 1998; Park et al, 1997). On the other hand, case study research repeatedly reports evidence of worker dissatisfaction with aspects of teamworking, particularly regarding peer pressure and its tendency to fragment any shopfloor collectivity (Graham, 1995; Rinehart et al, 1997). In this paper, I suggest that these findings indicate a greater need for attention to the internal social processes and dynamics of teams, and for these to be contextualised through consideration of various organisational factors and the broader environment.

In the following section, I discuss some recent research findings from projects looking at teamworking in various manufacturing sectors and identify some issues that arise from this research. I leave to one side the extent to which research findings in manufacturing settings may or may not be applicable to the experience of workers in other sectors of the economy. I then discuss a key aspect of teamworking - inter-worker relationships - drawing on ethnographic research conducted in two manufacturing facilities. Through a detailed analysis of the causes and consequences of peer pressure as a control system, it is possible to discern certain features of these cases that contribute to the specific character of shopfloor relations. In a final discussion section, these dynamics are contextualised.

1One explanation for these discrepancies is that surveys of managers or trade union representatives do not accurately reflect the views and attitudes of the shopfloor workers themselves. A second, related explanation is that the survey method is not effective in researching the perceived reality of the shopfloor.

2Nelson (1998) has provided a recent analysis of the similarities and differences between manufacturing and service work. While this is a useful avenue of discussion, there is a danger of over-stylising the contrasts between these spheres of work.
Recent research

Teamworking has attracted considerable attention in recent years, and discussion of teams and their workers has been hampered by a tendency to collapse empirical difference and conflate terms and meanings. It has become increasingly obvious that there are various forms of teamworking which deal with different types of work, are structured differently, have different implications for workers and different objectives for management. In addressing these problems, various authors have sought to characterise or classify teams based on aspects of what the team does (Cutcher-Gershenfeld et al., 1994; Thompson and Wallace, 1996); what management intends to achieve through teamworking (Mueller, 1994); or how the team is organised (Lowe et al., 1997; Murakami, 1995). These represent useful attempts to bring some common understanding and pattern to our research, but as Bacon and Blyton (1998: 3) remark, ‘taxonomies can encourage an oversimplification of reality and debate about that reality’.

In addressing the need for a fuller and more holistic analysis of teamworking, Bacon and Blyton (1998) propose to research the inter-linkage of the objectives, structure and outcomes. This is a positive step, since it is evident that much research on teamworking has taken a limited or narrow view of what is important in understanding what the team does, how they do it and what outcomes are observed. For instance, something that is commonly underplayed in the literature is the question of what aspects of the work are actually conducted by the team as a team, rather than by individuals under its umbrella. In response to the confusion of activity, structure and outcome, Engeström (1998) argues that teams should be analysed as ‘multiply mediated, object-oriented activity systems’ and that the nature of teams is dependent upon the historical type of production within which they are implemented.

From their survey of workplace trade union representatives in the United Kingdom steel industry, Bacon and Blyton (1998) outline a contingency model to consider the relationship between management rationale, type of teamworking and organisational and human resource outcomes. This model advances a dichotomy between ‘high road’ and ‘low road’ team working. High road teamworking is associated with management having economic, cultural and social objectives (see Mueller, 1994) and is seen as capable of delivering benefit to the organisation and the workforce (Bacon and Blyton, 1998: 6). Low road teamworking arises from management having purely economic objectives, and is postulated to result in a limited and narrow range of organisational outcomes with a less positive outcome for workers.

Bacon and Blyton’s results suggest that it is with the adoption of a more fully developed form of teamworking - the high road – that a greater positive impact on both organisations and employees is effected. Where management had broader objectives than the purely economic, the trade union respondents in the survey reported that improved operational performance was being achieved through teamworking and in conjunction with improvements in workers’ motivation towards, interest in and enjoyment of their jobs. The Australian Centre for

Automotive Management have reported some similar findings from their survey of the Australian automotive sector, although in that study, trade union representatives were more ambivalent on the positive impact of teamworking on job satisfaction (Park et al, 1997). What these survey-based studies have been unable to adequately address is why these results are found, and what it is about the changes in the nature of work and working that encourage positive outcomes.

Much of the recent case study research appears to have taken place in 'low road' plants. The study of the GM-Suzuki joint venture in Canada is a good example (Rinehart et al, 1997). In their book *Just another car factory?* the authors report worker surveys, shopfloor observation and interview data. These data suggest that teamworking at that plant was not viewed as having wholly positive outcomes by the workers themselves. In particular, Rinehart et al are critical of any notion that teams in contemporary manufacturing might be considered 'self-managing' or 'autonomous'. In addition, they follow others (eg. Lowe et al, 1997) in questioning the degree to which teams may be considered essential for operational success. It is clear from the work of Rinehart et al (1997) that the experience of teamworking cannot be divorced from the other factors influencing worker perceptions and attitudes in their day-to-day work. Nonetheless, there are certain issues which are directly associated with teamworking.

A key feature of teamworking regularly reported in case-study research is peer pressure. Rinehart et al (1997: 89) report: 'Teams provide a lateral control system in which peer pressure is combined with more traditional supervision'. In Graham's (1995) study of the Subaru-Isuzu car assembly plant in the United States, workers often pushed each other to complete work, work to speed and not make mistakes. Graham (1995: 100) reports that this peer pressure may arise from the threat of having one's job intensified in order to cover a team member, or from the team's sense of pride in their work. She concludes that peer pressure is central to the means of management control and that it acts to extend management prerogative over workers. Graham (1995: 133) identifies social, cultural and economic objectives in the use of teams in the Japanese model, and argues that a 'psychological tension' results for workers.

While case research of teamworking has consistently emphasised the significance of normative controls exerted by the team members upon themselves, there has been relatively little detailed discussion of the sources, nature and outcomes of peer pressure on the shopfloors of contemporary manufacturers. This is central, since it would appear that inter-worker relations are a critical aspect in the success of teamworking, in terms of operational and workforce outcomes. I discuss this in the following section by drawing on research conducted in a Japanese consumer electronics plant (Nippon CTV) and a European auto components maker (Valleyco), both situated in the United Kingdom. The primary sources of data are from periods of participant observation at the two plants; details of the research are published elsewhere (Delbridge, 1998).

Both plants operate with lean production regimes. In particular, the Japanese plant runs with very low buffers of inventory, tight manning and extremely close monitoring of quality. At each of the plants, workers are grouped into teams with a team leader. However, the language of teamworking is most advanced in Nippon CTV, where all workers are 'members' and under-performers are 'counselling' over
Teams in contemporary manufacturing

their future work performance. Both plants recognise trade unions; Valleyco has a traditional bargaining arrangement with two different shopfloor unions, while Nippon CTV has a single union agreement. Most shopfloor workers in the two cases were women.

Teamworking in a low trust-high surveillance environment

For the workers, social relations are key to their perceived experience of the shopfloor. Those workers who spoke favourably about the plant in which they worked tended to concentrate on their fellow workers as the most significant plus. One of the younger male workers at Nippon CTV was fairly non-committal about the work itself; the job was ‘OK’, but ‘They’re a good group here, that’s what it’s all about’. By this he meant that people ‘pulled their weight’, and if they did not, there could be ‘problems’. At Valleyco, one woman left to work at a nearby Japanese transplant because the money was better, but later returned to Valleyco. Her friend commented: ‘The work was OK but she didn’t like the girls on the line’.

The individual personalities and actions of workers and managers are important in understanding the detail of the workplace relations in the plants. Many workers regarded individuals of the same formal level and authority in a different way, depending upon how they perceived them to act in practice. This was particularly the case with regard to the first line of supervision. For example, a young testing operator complained to me about his team leader. He felt that she had not treated him with respect when he first started on the line, and had complained to the shop superintendent. He told me: ‘I had her [the team leader] in the coffee lounge [where workers are ‘counselled’ and disciplined]. We’d all worked this overtime for her to clear the piles of panels all on the trolleys, but she never even said ‘thanks’’. While the tester cited a lack of respect on the part of the team leader as the cause of conflict, he also added that she ‘sticks to the [rule] book too tightly’.

The persistence of resistance

While it has been argued that teamworking contributes to workers identifying with company goals and may lead to these being internalised as their own (Barker, 1993; Sewell and Wilkinson, 1992), workers at both plants took steps to at least symbolically demonstrate that they did not share management’s objectives and values. At Nippon CTV, the unwillingness to wear the company uniform, workers’ reluctance to work overtime and the rush to leave the premises at the end of the shift indicated that workers did not identify with the company. At Valleyco, the divisions between management and labour were even more evident, with workers actively withholding effort and regularly voicing their opposition to management.

At both plants, workers failed to participate in any discretionary activities. For each case, worker suggestions for improvement were virtually non-existent. Nippon CTV had abandoned quality circle activity and Valleyco had never had small group problem solving. However, workers do not simply resist working and only do the minimum required. There are a number of aspects to the relations between workers themselves, and between workers and managers, which can help in understanding their behaviour. From the research, it became clear that workers were selective in whom they would assist in their work and whom they derided as ‘lazy cows’. Some members of the team came under considerable pressure to work harder and more accurately, particularly when fellow workers felt they were ‘not trying’. Another
distinguishing characteristic of who could expect help was the extent to which the workers felt their own position was understood and sympathised with by their superiors.

A clear example of how workers tended to empathise with, and be supportive of, those who were sympathetic to their own position occurred in the moulding shop at Valleyco. The two quality inspectors working, Adam and Calum, carried out the same tasks, one on the morning shift and one on the afternoon shift. However, Adam was extremely unpopular with the setters and operators in the moulding shop, commonly regarded as 'knowing fuck all'. In sharp contrast, Calum was respected and seen as very effective in his job - 'You can't hide anything [of poor quality] from Calum, he'll find it at the bottom of the bag'. Paradoxically, Calum did not apply the quality levels to the letter, and told me that if possible, he would let things pass his inspection; 'If it's not alright then I'll stop it. My job is to stop the rubbish. But if they [the operators] say, 'That's the best we can do' then I will pass them. It is very rare for me to take things to my boss'. It was Calum's willingness to recognise the constraints on the operators that won him respect. On the other hand, Adam was seen as petty and stupid, and without an understanding of the machines and their limitations or the problems experienced by the setters and operators.

Adam's unpopularity far surpassed the verbal abuse regularly directed his way; a supervisor once said to me, 'Someone'll knife him one day'. On one occasion, he was tied up on the last day before the Christmas break and thrown in a skip. His supervisor told me, 'If I hadn't found him down in assembly, he'd have been there all Christmas'. On another occasion, he was tied up and dumped in a box and put on a lorry; 'If the security bloke hadn't found him at the gate he'd have gone to Birmingham'.

**Shopfloor fragmentation**

The relationships that form between workers and their superiors are only a part of the social situation; to a significant extent, workers' behaviour must be understood in relation to their interaction with fellow workers. The practical significance of these relations was particularly evident at Nippon CTV and the areas of Valleyco where some form of teamworking had been introduced. In these situations, the actions and attitudes of individual workers were seen to have an effect, often directly, on the work experience of other workers. Under group-based work systems with reduced buffers of time or inventory, this increased coupling of worker activity resulted in heightened potential for inter-worker tension and disagreement, with a resulting fragmentation in workplace relations.

The attitudes of workers to their peers seems to be informed by three factors: their respective personalities and whether they 'get on'; whether the person in question is seen as 'trying' hard enough (meeting effort norms); and whether the individual's actions have a direct and negative effect on their fellow workers. The first of these is intangible, although one of the line workers who received a lot of help in maintaining her quality levels from fellow workers commented: 'They only spot [and correct] the mistakes of the people they like'. At Nippon CTV, all quality performance is monitored at individual level, and the informal checking of

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4 However, Hyman (1992: 129) reminds us that 'The construction of broader solidarities has always required a deliberate and precarious effort' which has typically proved temporary and partial.
workmates allows some operators to avoid disciplinary action for exceeding the strict defect levels.

The second and third elements were constantly demonstrated during the interactions of workers. For example, line workers at Nippon CTV would side with the senior member against a fellow worker if they felt that the worker had not been trying. For instance, such a situation arose with one of the component insertion workers. She was moved from quality inspection because she had been letting through too many rejects. However, she could not keep to the line speed on insertion. She did not receive any sympathy or additional help from her workmates. This necessitated a transfer of some of her workload onto a more experienced line worker, which clearly caused resentment. Descriptions of the worker as a 'fat' or 'lazy cow' abounded from the other line workers, with comments such as 'Look at her, she's not even trying', or 'It's no wonder she can't keep up, moving at that speed'.

The extra work taken on by the experienced worker did not seem to cause her undue problems, but that was not the point in the eyes of the workers. It was clear that the failure to work at a certain speed (the speed that the other members deem appropriate) led to peer group pressure to increase speed, or at least triggered resentment and conflict. In effect, as long as a worker appeared to try, it did not seem to matter if they were 'hopeless' or 'useless' and needed help. If they were fairly popular, if it was not too inconvenient for his/her fellow workers and was for a short period of time, little comment was made and the other members of the team would help out.

As with other conflicts over whether workers were working 'too fast' or 'too slow', this example indicates that workers have an appropriate level of effort in mind when interpreting their workmates' activities. The vast majority of workers at both plants did not simply avoid activity, nor did they seek to do the minimum. Rather, they appeared to have some accepted level of effort that was seen as legitimate or 'fair'. As a consequence, individual workers at both plants occasionally came under peer pressure to work faster. Equally, a worker at Valleyco experienced pressure to work slower, and 'rate-busters' came under peer pressure to conform to the norms of work speed.

Discussion: the context of worker relations

Interrelations are partially shaped by the nature of the production system. Informal personal dynamics are compounded in importance because of the 'blame mechanisms' which are part and parcel of quality control systems, especially at plants like Nippon CTV, where every error must be attributed to an individual worker. Not surprisingly, the most deep-seated rifts observed along the line at Nippon CTV were between workers at different points in the quality inspection process, and the most directly confrontational behaviour between workers surrounded the monitoring and recording of quality. This is similar in some respects to the instances of open hostility between Adam and the setters and operators in the moulding shop at Valleyco reported above, although at Nippon CTV, quality

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5Graham (1995: 100) describes a similar situation when 'team members cooperated with the team leader in an attempt to force compliance from another team member concerning his job performance'.

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inspection is carried out by fellow team members rather than a white-collar specialist.

At Nippon CTV, workers regularly became embroiled in disputes over whether they should have a defect 'booked' against them. There were particular disagreements during one period, when I was observing the end of line inspection. One of the inspectors claimed that another inspector was booking defects against her (the work of inspectors is inspected): ‘She’s always booking everything and getting other people into trouble for things that aren’t their fault’. Her fellow inspector then said 'I’ll drag her by her hair into the coffee lounge if she gets me booked for that'. Later one added: ‘We don’t work as a team here do we?’

The inspection worker had been warned by the team leader about her work performance, and was under pressure to improve. At one stage, she complained to the team leader that she had to help one of the other line workers who had a problem with incoming parts of poor quality. The lack of slack in the production system, and the pressure to perform their own tasks successfully, led to individual workers blaming each other for problems that arose. It is not just the quality system and its onus on ascribing blame for faults that inform the relations between some workers; the pressure of a lean manufacturing system, with its unremitting high speed and no informal breaks, exacerbates difficulties for the workers and further aggravates conflicts.

The self-policing elements of peer surveillance in quality control are also evident in the Valleyco case, but the lack of an effective and integrated information system in this case means that divisive and fragmenting ‘blaming’ behaviour is not such an important factor in inter-worker relations. This evidence supports the work of others, who have concluded that, at least in part, the function of the team and the management system within which it operates are important in interpreting teamworking (eg. Cutcher-Gershenfeld et al, 1994; Engeström, 1998).

There are other important factors. Space does not permit a full discussion here, but it is clear that the history of the plants contributes to what Chung (1994) has called ‘factory consciousness’ - the shared norms of the shopfloor. Equally, the formal industrial relations arrangements at the two plants are very different, and it is evident that these may have an impact. In the cases reported by Rinehart et al (1997) and Graham (1995), the trade union had exerted considerable influence at times, including direct organised resistance.

Finally, the plants themselves must be put into context. Each is part of a major multinational corporation, making high volume products for mass consumption markets. One of the outcomes of the high surveillance-low trust regime at the two plants was a consistent unwillingness on the part of the workforce to participate in any discretionary work activity, such as continuous improvement. In the area of innovation, the plant was not delivering. These plants may be seen as 'branch plants'; in an international division of labour that sees production migrate to lower cost bases, higher value activity, involving higher skills and better wages, remains in the country of origin (Delbridge et al, 1998). This clearly influences the production system and the experiences of workers.
Teams in contemporary manufacturing

Conclusion

Individual accountability for defects and the mutual loyalty of workers can lead to informal behaviour that actually improves the plant's quality performance, in line with management wishes. Each time a worker corrects an up-line worker's error to save them being booked, the quality of the product is improved. Quality is an important element in the control of labour at the two plants, since it has a certain inherent legitimacy. Workers may more readily identify with the goal of good quality than with other management objectives. Management and customers are able to draw on this legitimacy in attempting to secure compliance from the shopfloor. Nevertheless, the research presented here suggests that workers are active in choosing whether they will assist a fellow worker through the correcting of faults. Rather than the product, orientation to their fellow workers determines this (cf. Engeström, 1998).

These findings differ from those of Barker (1993), who discusses the development of a system of 'concertive' control in a plant with the introduction of teamworking by management. Concertive control is an example of normative control. According to Barker, this control includes the following features: increased employee motivation and commitment; peer pressure as the primary mechanism through which members of the team are controlled; and team members being 'relatively unaware of how the system they created actually controls their actions' (Barker, 1993: 434). Over time, this control also includes the development of enacted values into 'rational rules'. Under such circumstances, workers manage and discipline themselves, 'proper' behaviour is inferred from value-based discourse and these rules of behaviour become incorporated as an integral part of workers' sense of self (Fleming and Stablein, 1998: 10). Fleming and Stablein argue that under concertive control, an illusion of autonomy and flexibility develops.

The findings reported here have demonstrated that at least under certain conditions of teamworking, workers remain aware of, and are active in taking, choices about how to act and interact. Most importantly, research that underplays the active agency of workers may neglect that normative control can be exerted in such a way as to subvert management goals, as well as promote them. Workers may establish pockets of solidarity that are effective in seeking support and establishing meaningful patterns of resistance, or at least mechanisms for surviving the working day. Little detail is given, but Rinehart et al (1997: 107) report that workers at the CAMI plant increasingly recognised the negative consequences of peer pressure and acted to encourage team solidarity. That said, successful collective resistance is highly problematic under the conditions found at a plant like Nippon CTV, with its combination of a strict lean production regime, an acquiescent trade union and unfavourable local economic and labour market conditions (see Delbridge (1998) for a comprehensive discussion).

More generally, the divergence of survey and case study findings must be addressed. While functionalist-based surveys of strategy, structure and outcomes have undoubted value, their findings will be more readily explained when allied to approaches which explore the social relations of teams and team members as active agents.
References


Teams in contemporary manufacturing


Biographical notes

Stephen Procter is Reader in Organisational Analysis in the Department of Management, University of St Andrews (United Kingdom). He is co-founder and co-organiser of the International Workshop on Teamworking, and is at present involved in a project investigating the introduction and operation of teamworking in the United Kingdom's Inland Revenue. He is co-editor of Teamworking (with Frank Mueller, Macmillan, 2000) and of a special issue of Human Relations (Vol. 53, No. 10, 2000) on teamworking.

Frank Mueller holds a Chair in Management at the University of Leicester. Previously, he held positions at Royal Holloway University of London, Aston University, London Business School and Templeton College, Oxford. His research interests focus on work organisation, teamworking, the HRM debate, institutionalist theory and the so-called 'global-local dilemma' experienced by Multinational Organisations. He has published on these topics in 'Human Relations', 'Organisation Studies' and the 'Journal of Management Studies', amongst others. He is co-organiser of the annual International Workshop on Teamworking (IWOT).

Basil Tucker is a director of one of South Australia's leading management consulting practices: Mack Consulting Group. Basil holds a Bachelor of Business and an MBA, and is a graduate of the Australian Institute of Company Directors. He is a member of several public and private sector boards and a visiting tutor in the School of Management at the University of South Australia. Prior to joining Mack Consulting Group, Basil worked for an international consulting organisation where he undertook assignments in the eastern states, the United Kingdom and the United States of America. Basil's professional areas of expertise lie in strategic management, organisational reviews and change management. His clients include state and local government, particularly in the healthcare industry. Major highlights of his career include being the only consultant in the state to apply Semler techniques to organisations, restructuring a private hospital and saving it from bankruptcy, tutoring in management subjects and being able to impart his knowledge and experience in linking real-world situations with textbook material.

Alick Kay is a lecturer in organisational psychology and management in the School of Management at the University of South Australia. He is also a registered psychologist in South Australia and on the local board of the College of Organisational Psychologists. Alick has been in a number of teams, researching Japan-Australia negotiation skills, job redesign, teamwork, and team-building for the automotive industry. In addition, he has run local and overseas workshops in group dynamics, interpersonal skills, organisational communication and stress reduction. His interest in Semler's work led him to present at international conferences in the United States of America and United Kingdom in 1998.

Roberto Marx is currently Acting Professor of the Department of Production Engineering at the University of São Paulo (Brazil), where he has been an active researcher for a number of years. His research interests include teamworking in different environments, organisational design and semi-autonomous groups and new forms of intra-firm and inter-firm organisation in the automobile industry.
Eliane Shiobara has been teaching in management at the Centro Universitário Uninove since 1999. She is currently completing a Masters in the Production Engineering Department at the University of São Paulo and her research interests encompass organisational design and semi-autonomous groups.

John Thompson received his engineering training, undergraduate and postgraduate education in the United Kingdom. After many years of industrial experience in manufacturing, he joined the academe in Australia, lecturing and researching in the areas of manufacturing strategy, technology management and quality engineering. He has been a visiting lecturer to a number of overseas universities and has participated in a number of funded research projects. Currently, he is an adjunct in the School of Engineering and is associated with the Australian Centre for Automotive Management and the Management Schools in the University of South Australia. He also provides industrial-based training and consulting services to industry.

Luke Faulkner holds Graduate Diplomas in Social Science and Business Administration and has also completed an Associate Diploma in Labour Studies and a Master's Degree in Policy and Administration. Luke lectures in the School of International Business at the University of South Australia in the areas of human resources, industrial psychology and industrial relations. He is also highly involved in the UniSA research centres of ACAM (Australian Centre for Automotive Management) and FAME (Foundation for Manufacturing Education) where his major roles are close liaison with manufacturing organisations across South Australia and the development of industry-specific accredited and non-accredited courses. Luke is currently undertaking a PhD with the University of South Australia.

Robert Park is a project manager at the Australian Centre for Automotive Management (ACAM), University of South Australia. In the last five years, he has been involved in a number of research projects focusing on teams, on issues such as the uptake of teams, and the roles and responsibilities of team leaders and members in the Australian automotive industry. He has also visited many companies that utilise teams in Australia, the United Kingdom and the United States of America. Prior to his appointment in ACAM, Robert worked in a self-managing team within a South Australian Institute of Technical and Further Education.

Barry Elsey specialised for many years in academic research and teaching in adult and continuing education, notably at the universities of Liverpool and Nottingham, before coming to South Australia in 1988. Since then he has focused on organisational change management, with special reference to workplace learning. He has published widely on several aspects of adult and continuing education and also presented his work in many countries. Asahi Fujiwara, from Chukyo University, (Nagoya, Japan) collaborated with Dr. Elsey on the kaizen research as a research student at the University of South Australia. She is currently doing a PhD on new business ventures in the Japanese economy.
Richard Williams is a principal lecturer in Library Studies at the Adelaide Institute of TAFE, an organisation that has based its staffing structure on integrated work units since 1993. His main research interests are leadership/management in semi-autonomous work teams, barriers to adult education, and the learning styles of adults. He is currently studying towards a Doctor of Education at the Flinders University of South Australia.

Richard Gough is a lecturer in Industrial Relations in the School of Management, Faculty of Business and Law, Victoria University of Technology. Prior to working at Victoria University, he was a Senior Research Fellow at the National Key Centre in Industrial Relations at Monash University. Whilst at Monash he was responsible with the Key Centre’s Director, Professor Malcolm Rimmer, for a major report for the Federal government on award restructuring entitled ‘Progress at the Workplace: Workplace Reform and Award Restructuring’.

Hilary Martin is an educational manager at a South Australian Institute of TAFE. Her interest in teams has developed from membership and management of several different self-managing teams, and from research conducted through studies in education and educational management. She has worked extensively with teams in a number of government departments and provided consultancy services to teams in other organisations.

Linda Chaousis is a management lecturer and industry consultant for the Torrens Valley Institute of TAFE. Her involvement with self-managing teams began in 1975 when she established the Human Resource department for a progressive college in California, which was introducing what was then called participatory management to its organisation. She has since been in positions of management, training and consulting in the areas of information technology, organisational redesign and management. She is currently coordinating the highly successful Innovative Management Development program which she developed for practicing managers, offering them a formal qualification via workshops and activities targeted at their workplace. Linda offers this program in a number of organisations throughout Adelaide. She has written several management video scripts, articles and books, including the workbook Managing and Developing Teams, which was listed as number 7 in the Top Ten Business Titles section of The Australian in February 1996.

Crina Virgona has worked in the industry education field for about 15 years. She began teaching English to migrant workers and has since moved into broader fields of communication and workplace change. She has published in journals on English as a Second Language and workplace communication. She was a co-author with Robin Sefton, Peter Waterhouse and Neil Marshall of the 1998 case study ‘Opening Doors - Enterprise Based Training in Action’, which won national acclaim as an ANTA Best Practice Project. Crina is currently employed as an industry training consultant with Workplace Learning Initiatives, a Registered Training Organisation engaged in on-site shopfloor training and development across a range of industries and workplaces. Her recently completed master’s research investigated workplace language and training in the context of industry and enterprise change.
Peter Waterhouse is Director in Training and Development of Workplace Learning Initiatives. He has been involved in writing, research and practice in workplace education over the last decade, having formerly been a TAFE teacher, consultant and Australian Volunteer Abroad. His research interests include workplace learning, facilitating and coping with change, experiential learning and professional development. His recently ratified Ph.D. thesis documented a qualitative investigation of these themes within the context of adult education practice in different settings.

Robin Sefton is the Managing Director of Workplace Learning Initiatives. Robin has also been involved in workplace education as an educational manager and researcher over the last decade, having previously occupied management positions within TAFE. She has also recently completed doctoral studies investigating and documenting management strategies for effective vocational education.

Michael Armer is a Professor of Sociology at Florida State University, Tallahassee Florida, United States of America. In addition to group dynamics, his research and teaching interests are in the areas of social psychology, education, and national development. He is currently collaborating on research concerning group entrepreneurship.

Chris Horton describes himself as a strategic thinker and a systems builder. He has had roles in organisational development, management and teaching roles in adult and community education (Victoria and New Zealand), trade union education (Australia and New Zealand), university teaching and research (NSW and New Zealand), community and disability services and Technical and Further Education (Victoria). Chris has also served a period as an organisation development consultant. Headed by Chris since its foundation in 1998, the Educational Development Services division at the Wodonga Institute of TAFE is a highly diversified system (26 staff, $1.8 million budget) undertaking government-funded and independently contracted VET research, planning, resource development and flexible learning delivery and support. Recent projects have included NCVER-funded research (the Mentoring and Changing Relationships projects with Dr Stephen Billett of Griffith University), and a range of ANTA/OTFE Best Practice projects evaluating models of workplace-based training, and human resource management and planning in the VET sector.

Janet Osborne commenced working as a Development Officer (Planning) with Wodonga Institute of TAFE in a newly created position in August 1995. Prior to working with Wodonga TAFE, Janet worked for a magazine and newspaper publisher (1989-1992) and as a development officer with two Regional Development organisations (1993-1995). Through these involvements, she has gained insight into the motivations of the corporate world and the daily considerations faced by organisations funded by public money. These have also been powerful insights into the reasoning behind the formation of teams, and possibly why people avoid them.
Peter Shanahan joined the South Australia Police in 1975 and has worked both in uniform and then for 16 years as a detective. For five years he worked as a police hostage negotiator and is currently the manager of the South Australia Police Media Liaison Section. He holds an Honours degree in law from Flinders University and is currently undertaking a Masters of Education through the University of South Australia, working on a thesis examining the links between police culture and the concept of the learning organisation. Peter is a member of the Criminal Law Committee and the Alternative Dispute Resolution Committee of the Law Society of South Australia and is the Vice President of the Police Health Fund.

Tricia Hiley is Program Director of the Royal Melbourne Institute of Technology’s innovative postgraduate program in Innovation and Service Management. Participants are executives, managers, consultants and professionals from many and varied organisations. She brings her experience as a consultant in organisation change, a quality practitioner, small business operator and adult educator to construct and run this program. Tricia also consults to businesses in areas including executive coaching, team development, development of learning practices and research in organisational effectiveness. She holds a Masters of Business Degree in Organisation Change and Development and is currently doing a PhD on the changing nature of the Australian workplace.

Rick Delbridge is a Senior Research Fellow at Cardiff Business School, University of Wales. His research interests include the management of continuous improvement and the role of labour in contemporary manufacturing, manufacturing innovation in SMEs and current developments in the trade union movement. He is the author of Life on the Line in Contemporary Manufacturing (Oxford University Press) and co-editor of Manufacturing in Transition (Routledge).

Roger Harris is currently Director of the Centre for Research in Education, Equity and Work (CREEW) within the University of South Australia. He has substantial research experience in the vocational education and training (VET) sector, focusing particularly on Australian training reform and workplace learning. His current work includes a range of nationally-funded research projects on the role of workplace trainers in industry, the changing role of VET staff development, apprenticeships and traineeships (two projects), work placements, learning cultures in organisations, workplace learning in SA Police and notions of continuous improvement in the automotive industry. Dr Harris publishes widely, including co-authoring the book, Competency-based Education and Training: Between a Rock and a Whirlpool (Macmillan, 1995), and is an executive member of the Australian VET Research Association.

Emily Collins has completed a Bachelor of Science and a Bachelor of Arts, the latter in Professional Writing and Communication. She has assisted research in various fields such as Psychiatry and Obstetrics and Gynaecology, in addition to editing, writing and publicising. Emily is currently working for CREEW as an editor/communications officer/research assistant. She is also a writing consultant, and dabbles in scientific journalism. Her research interests include the discursive construction of knowledge (particularly with regard to science), sociolinguistics, semiotics, psychology and neuroscience.
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Teamworking: some international perspectives

The central theme of this collection of papers is teamworking as an alternative form of work organisation. Many organisations have either introduced or are contemplating the introduction of teamworking. Such a move is to help them remain competitive in the current deregulated global economic climate and move away from direct management control to a more participative style that encourages greater commitment from workers.

In response, the contributors to this book have undertaken analyses of some of the contextual and conceptual issues of teamworking, such as change management strategies and implications for leadership and organisational culture. Through case studies, authors have also examined the effectiveness of teamworking and how employees deal with it, and explored the role of training in its introduction.

Hailing from a variety of locations such as Australia, Brazil and the UK, contributors have considered how these issues have been dealt with by organisations in different industry sectors and world settings. In addition to businesses concerned with developing a marketable product, for instance auto manufacturers, the adoption of teamworking is illustrated in a variety of alternative organisational contexts, such as technical and further education and hostage negotiation in policing.

It is hoped that this book will assist readers in gaining a greater understanding of many of the important issues relating to teamworking.