

TEAM LEADER TRAINING IN THE AUSTRALIAN AUTOMOTIVE INDUSTRY

Richard Cooney

*Working Paper 1/05
February 2005*

**DEPARTMENT OF MANAGEMENT
WORKING PAPER SERIES
ISSN 1327-5216**



Abstract

This paper explores the recent developments in vocational education and training for team leaders in Australia's automotive industry. The widespread introduction of team working in Australia was accompanied by the introduction of new vocational qualifications and the paper examines the impact that this has had on the skill development of team leaders.

Team development in the Australian automotive industry is found to be increasingly dependent upon the informal work of team leaders as the automotive manufacturing companies wind back their commitment to broad-based skill development at work. There is an increased focus upon on-the-job skill development but much of this happens informally, with formal competency assessments taking place outside the team. Team leaders have an important role in team development but this role is not recognised in current competency-based training in Australia.

This paper is a work in progress. Material in the paper cannot be used without permission of the author.

TEAM LEADER TRAINING IN THE AUSTRALIAN AUTOMOTIVE INDUSTRY

INTRODUCTION

Team development has been identified as an important feature of work teams. The evolution of work roles within the team, the development of skills and competencies amongst team members and the expansion of the scope of responsibility of the team, are all seen to be related to the level of development achieved by the team. Teams are not static entities, but rather are purposeful human systems that are shaped by the organizational environment.

When we examine the influences of that environment upon team development, production system design is frequently seen to play a major role. The design of the production system is seen to influence the scope for team development and also the possibilities for team learning (Adler & Cole 1993, van Amelsvoort & Benders 1996, Hut & Molleman 1998, Wellins, Byham & Wilson 1991).

Whilst much of the debate regarding team development has focused upon the design of the production system, comparatively little attention has been paid to the design of the training system responsible for the building of skills and competencies amongst team members. Learning at work is one of the foundations of team development and yet comparatively little attention has been paid to this dimension of team development. Learning at work establishes the breadth and depth of team members production system knowledge and it also develops the interpersonal and communicative skills that underpin team development.

Learning at work by team members is dependent upon the provision of opportunities to practice and develop skills, it is dependent upon the quality of feedback about performance, and it is also dependent upon the rewards that are available to team members for the acquisition of skills (Ashton 2004, Darrah 1996, Koike & Inoki 1990). Whilst the production system design does indeed have a significant influence upon opportunities for learning and the quality of feedback and rewards; the Vocational Education and Training (VET) system has an equally significant influence here. The VET system influences how employees learn (whether formally or informally), it influences what is learned (the breadth and depth of knowledge and skill) and it influences which skills and competencies are recognised and rewarded (by both recognition rewards and monetary rewards). The training system has a significant role to play in team development within the firm and yet this role is little studied beyond applications of Human Resource Development policy and practice. Training is seen, in other words, as a purely management directed activity within a single firm. The links between training, the employment relationship and the VET system are poorly theorised, and the impact of VET system upon the development of skills and competencies within the firm is little understood.

This paper attempts to address this gap in the team development literature. The paper mounts an argument that team development is an important feature of work teams and that this development occurs within a context that is shaped equally by production system designs and VET system designs. The production system is an important factor in team development but the VET system provides the channel through which learning and development practices within the firm are legitimised. The VET system influences the provision of learning and development experiences to team members but it also influences which developmental experiences are recognised and accredited and hence it has an impact upon the way in which learning and skill development can occur in the workplace.

TRAINING IN THE AUSTRALIAN AUTOMOTIVE INDUSTRY

The Australian Automotive Industry has been the subject of two waves of restructuring in the past 20 years. In the mid-1980s a government plan for the industry led to the first wave of restructuring. Developed using bipartite and tripartite mechanisms, the plan led to the

disappearance of tariffs and protection for the industry, a spatial restructuring of vehicle manufacturing and the introduction of new management practices (JIT, TQM, etc.). The implementation of the vehicle industry plan, along with other industry plans (e.g. Engineering, Textiles), was also associated with a series of industrial relations reforms and VET system reforms (Curtain 1994, Lansbury & Niland 1994).

The late 1980s saw a period of sustained reform to Australia's Vocational Education and Training (VET) System and this resulted in some major changes to training and development activity within the automotive industry (Cooney 1997, 2002). New vocational qualifications were introduced for those with below trade level skills (i.e. production operators) providing them with pathways into technically skilled occupations (product and production specialists) and skill-based pay and classification structures were introduced. The introduction of the Vehicle Industry Certificate (VIC) for production operators represented the first time that such 'unskilled' employees were given access to vocational training. The certificate required the completion of 520 hours of training, 260 hours of on-the-job and 260 hours of off-the-job training. The off-the-job component was broad-based, giving employees training in the history and development of the Australian Vehicle Industry, employee rights and the operation of the Industrial Relations system, Occupational Health & Safety legislation, and so on. The on-the-job component also required the development of broad-based skills, requiring that employees rotate jobs to gain a knowledge of the whole production process. This commitment to broad-based employee skill development has, however, been wound back with the second wave of industry reform.

Where the first wave of restructuring was driven by Federal Government in Australia, the second wave of restructuring from the late 1990s has been driven by the automotive firms themselves. The implementation of standardised global production systems by the automotive manufacturers has led to the restructuring of supply chains within the industry and the development of more firm specific management practices. The implementation of systems such as the GM Global Production System and the Ford Production System, has seen these firms more closely integrate their Australian operations within the parent group, as the Australian subsidiaries have all strived to carve out a role for themselves within Asia-Pacific operations.

The development of firm specific practices following the implementation of standardised production systems is evident in the field of training and skill development. The Ford Production System, for example, includes Training as one of its eleven key elements, specifying the purposes of training, the architecture of the company training system and the nature of the training records to be retained. The Ford Production System (FPS) specifies that training should be linked to job requirements, company business plans and the requirements arising from the introduction of FPS itself. Training is seen as a firm specific good in FPS; it is provided to meet strategic business objectives arising from FPS and local business plans and to "Enable employees to successfully perform their job in a lean environment" The provision of training experiences, the content of training and the evaluation of training under the Ford Production System are focussed upon improved job performance and the more intensive use of human capital in production (Ford Motor Company 2002).

The implementation of these standardised global production systems in Australia has been accompanied, domestically, by the further deregulation of the industrial relations system and the creation of a market-based VET system. Employers had complained that the VET system was too curriculum driven and not sufficiently responsive to employers' business needs (Allen Consulting 19xx). The government responded to these criticisms by introducing a competitive training market and by deregulating training standards and curriculum. A series of new industry Training Packages were introduced. These merely specified the competency standards to be achieved to attain a vocational qualification – leaving the detailed implementation of training and assessment against these standards to the individual firm.

The combined effect of the industrial relations and VET system changes has been to reinforce the ability of companies to provide more narrow, firm specific and job specific training. The VIC has

been restructured from an industry certificate to an industry training package, the Certificate II in Automotive. The new certificate has no requirements for any particular form of training and consequently we have seen the winding back of some of the more broad-based elements of the old certificate system. GM-Holden, for example, now provides only 62 hours of off-the-job training to achieve a Certificate II in Automotive, as opposed to 260 hours under the VIC. Employees receive 32 hours of induction training (firm induction and plant induction) and 30 hours of training in the GM Global Production System; the balance of their training is now delivered on-the-job. The attainment of competency is now directly linked to the job, to job standards, work standards and task requirements. Training now reinforces specialisation in particular work areas and much of the training and assessment of employees have been delegated to on-line personnel, such as Supervisors. Training is increasingly delivered informally on-the-job and assessment is focused upon the demonstrated mastery of particular jobs through a job points factor evaluation scheme. Employees now progress in their pay and classification by demonstrating job mastery and skills in "beyond task behaviours" such as the management of contingencies and contributions towards continuous improvement activities. As one manager observed: "Participation in the Holden Suggestion Plan is now a mandatory job requirement."

The development of such narrow task focused training as automotive manufacturing firms in Australia continue to reform their production practice by implementing standardised global production systems has some important implications for team development in the Australian automotive industry. Skill formation and training in the Australian automotive industry is becoming increasingly focused upon the development of job specific and firm specific skills and this may effectively put a brake upon the ability of work teams to develop self-management. Teams may not progress far beyond basic levels of self-organization without the provision of appropriate learning and development opportunities (Buchanan, Evesson & Briggs 2002).

In order to explore the implications of these changes to the VET system for team development, this study examines the role of the team leader. It examines the forms of training and development received by team leaders, the work experience of team leaders and their role in the development of team member skills and team competencies. By looking at the work and learning of team leaders we can gain one perspective upon the impact of the training system in the workplace.

SAMPLE AND METHOD

A purposive sample of four plants in the automotive industry was constructed to begin an examination of these questions. The plants were selected because they had all implemented vocational training for shop floor employees and had all moved to skill-based job classification and pay systems.

A blanket survey was conducted of team leaders in the four plants. The team leaders were interviewed and asked to complete a short questionnaire that asked them about the features of their work group, the characteristics of their jobs and the working climate within the company. Production, maintenance and in-direct team leaders (see Table 1.) were included in the survey.

Table 1: Survey Sample

Attribute	% of Team Leaders*
Group	
Production	52%
Maintenance	34%
In-direct	14%
Shift	
Day Shift	61%
Afternoon Shift	32%
Night Shift	7%
Gender	
Male	90%
Female	10%

*Team Leader n = 99

EMPLOYEE TRAINING

The team leaders (see Table 2.) had considerable job experience and a long tenure in their leadership positions. The leaders had a lengthy service with their current employer, attaining over 13 years of service on average, with over three years of that service being service as the group leader.

Table 2: Team Leader Experience

	Minimum	Maximum	Mean*
Age	22 years	62 years	38 years
Length of Service with the Company	4 years	35 years	13 years 5 months
Team Leader Tenure	1 month	11 years	3 years 2 months

*Group Leader n = 99

Despite the length of their service in the industry however, the leaders had a rather narrow work experience. In most cases their work experience was confined to work with their current employer and leadership of their current work group. Most leaders (80%) had never held a position of responsibility at another company and most (77%) had no experience of leading other teams in their current workplace. Only 23% of leaders had experience leading a team other than the one that they were currently working with.

The formal and informal learning undertaken by the team leaders had thus taken place largely within the one company with formal training reinforcing the focus upon company practice on the shopfloor. The team leaders (see Table 3.) had few formal educational qualifications gained outside the workplace. For most leaders, the only qualifications that they had were those gained at work.

Table 3: Team Leader Qualifications

Qualification	% of Team Leaders*
Secondary School Certificate	31%
Vocational Licence	69%
Basic Vocational Certificate	56%
Skilled Vocational Certificate	43%
Associate Diploma	7%
Undergraduate Diploma	2%

*Team Leader $n = 99$

Only 31% of leaders had completed an end of school certificate before commencing work. Many of those who had attained this qualification, however, had done so outside of Australia, making it difficult for them to have their qualifications recognised for further education at Australian tertiary institutions.

Most team leaders held vocational qualifications gained through their current employer. Most production team leaders had attained a basic vocational certificate through in-house training provided by their employer whilst the maintenance team leaders had attained their Trade qualifications through company sponsored apprenticeship programs. A small number of the latter group had also gone on to attain higher qualifications in the form of an Undergraduate Diploma or Associate Diploma through company sponsored programs.

The in-service training received by the team leaders consisted of accredited and non-accredited training. The accredited training focussed upon the acquisition of job related skills whilst the non-accredited training focussed upon the acquisition of behavioural and communicative skills. Despite the importance of interpersonal and communicative skills for team development, most of the training provided for team leaders in this area was non-accredited. It was provided to meet in-house organizational development needs and so was not recognised and accredited through the VET system.

Very few team leaders had received any training to equip them with the skills to train and assess team members. Only 15% of team leaders had received training as a workplace trainer and only 10% had trained as skill assessors. The informal nature of the on-the-job skills training provided by team leaders is further underlined here, skill development is an important aspect of team development, team leaders do most of this work and yet they are not trained or recognised for this.

Table 4: Team Leader Vocational Training

Training	% of Team Leaders*
Organizational Development Training (non-accredited)	
Team Leader Training	77.8%
Quality Circle or Continuous Improvement Group Leader Training	31.3%
Workplace Communications	25.3%
Technical Training (non-accredited)	
Technical Training	21.2%
Quality Management	13.1%
Vocational Training (Accredited)	
Vehicle Industry Certificate	61.6%
Train the Trainer	15.2%
Workplace Assessor Training	10.1%
Union Training (non-accredited)	
Shop Steward Training	8.1%

*Group Leader n = 99

WORK ROLE EXPANSION

The provision of employee training has been associated with the enlargement of employee responsibilities at work. The adoption of new production practices in automotive manufacturing has led to the delegation of such enlarged responsibilities. This initial work role expansion occurred with the introduction of JIT and TQM practices in the 1980s, but has continued with the consolidation of these practices in firm specific production systems. Responsibility for such things as machine set-ups, routine maintenance, occupational health and safety, housekeeping and the maintenance of work standards has been transferred to production employees and is now integrated within firm specific systems of management and control.

Employee responsibility for quality control at source through the application of in-process controls such as check sheets and employee responsibility for continuous improvement through the application of data analysis and group problem solving techniques, now also increasingly conforms to firm specific procedures.

Table 5: Group Leader Job Responsibilities

Responsibility	% of Team Leaders*
Housekeeping	99%
Work Standards	93%
Continuous Improvement	75%
Production Records	43%
Quality inspections	
- visual inspections	68%
- gauge checking	51%
- instrument measuring	36%
Quality records	
- tally counts	25%
- records of visual inspection	31%
- Statistical Process Control	20%
Equipment set-up	
- carry out set-ups	66%
- assist with set-ups	13%
Equipment maintenance	
- routine maintenance	40%
- breakdown maintenance	47%
- scheduled maintenance	32%

*Group Leader n = 99

There was strong evidence of such enlarged work responsibilities amongst the team leaders. Most team leaders (see Table 5.) had responsibility for tasks such as housekeeping, work standards and making work improvements and around half the team leaders had responsibilities for quality, maintenance, equipment set-up and production control. The vocational training of employees thus shows a clear link with the enlargement of employee job responsibilities in the new workplace.

TEAMWORK

The formation of work groups has also been associated with a greater provision of training. The use of such practices to provide a supportive context for group work is important, for as Ray and Bronstein (1995) observe:

Without a supportive organization, teams will flounder and fail 80% of the time. ... The new human infrastructure must be in place as a framework to support team growth. When management trains only itself in team process and fails to construct a supportive and team-friendly infrastructure, teams cannot survive. (Ray & Bronstein 1995:121)

Pearce and Ravlin (1987) identify training and rewards as two key factors in the activation of self-regulating work groups, whilst Tannenbaum, Beard and Salas (1992) identify training as a key team building intervention. The provision of group member training and the provision of appropriate rewards are important supports for the effective operation of work groups (Cohen 1994, Goodman, Devadas & Hughson 1988, Hackman 1987, Sundstrom, De Meuse & Futrell 1990).

The group leaders in the automotive companies had received extensive skill and behavioural training and they had an important role in the training and development of their group members. Most group leaders (see Table 6.) were responsible for the on-the-job training of their group members and they spent an average of 3 hours and 20 minutes per week supervising the training

their group members on-the-job. Few group leaders, however, were engaged in providing formal off-the-job training (6%) or in conducting skill assessments (13%) of their group members.

Team leaders thus have an important role in group development through the provision of informal on-the-job training, but this role is not recognised through the VET system. The development of the behavioural skills to become an effective team leader is not recognised, nor is the important role that team leaders play in team member skill development.

Table 6: Training of Team Members

	% of Team Leaders*
On-the-job Training	80%
Off-the-job Training	6%
Skill Assessments	13%

*Group Leader n = 99

EMPLOYEE PROBLEM SOLVING

Learning at work was an important part of the group leader's job. The leaders reported an interest and a satisfaction from the learning associated with their work. The problem solving that occurred on-the-line or in group meetings was an important source of satisfaction with work.

Getting things done is easier now. The safety aspect of it. Things get fixed now where before they were let go. Things like dunnage and stacking, we've been involved in dunnage for these new parts that are coming in and the improvements that we make will make the job a lot easier. James – Production Group Leader

The highlight is the job satisfaction when there's a problem and I work it out for myself and work out easier ways of doing stuff. Tom – Maintenance Group Leader

It's a challenging job because it is very wide. It's not boring. Everyday you have something new to learn. Tony – Maintenance Group Leader

Involvement in decision making and problem solving added a new dimension to work for many group leaders. There were more open communications amongst group members and improved relations with management.

The group gives everybody an opportunity to participate in the decision making process. It provides a way for open discussion amongst your fellow workers. When you make a decision then everyone participates in it and hopefully it's the right decision. In the past we just used to be told to do something. John – Production Group Leader

The thing that has changed around here is that now they listen to you. Before it was just do it, I'm the boss and you just do it. And you did it, even if they had a stupid idea and you knew it would not work, you just did it and see it fail and then the boss comes around and says it's your fault it didn't work, you didn't do your job properly but all the time it was his idea. Now at least they come and listen, they ask you for your ideas and they consider your ideas and come up with a good plan. And it is better that you discuss it with them because then you don't get a kick in the pants. Nick – Production Group Leader

Making continuous improvements to work processes (80%), learning to operate new equipment (75%) and learning to make new products (73%) were the most important source of learning at

work. The group leaders spent an average of 2 hours and 25 minutes per week working on work related problems and many leaders (40%) reported regularly spending time working on problems.

There were however limits to the problem solving that could be undertaken in the workplace. Production pressures, a lack of time and resources or simple management countermand, often meant that problems went unsolved and this created frustrations and dissatisfaction for some group leaders.

The worst thing about the job is being stuck on the line. It's hard to do things, work on problems, other issues that you have to do or people to chase up. I can't do that, I can't leave because I'm stuck on the line. Jesus – Production Group Leader

Management consult us but they don't listen. Communication around here is very poor. Management overrule us. We come up with a project and they don't approve it. What's the words they use, 'not feasible' that's one, 'not cost effective'. Not feasible and not cost effective and that brings people down. Ivan – Production Group Leader

The good thing is that you get a chance to do something that you think is going to be beneficial but the frustration is that there's no support. In days gone by people in shirts and ties made all the decisions – now you have a chance to have a say but it still doesn't get through. There's no support. Brian – Production Group Leader

We like to make improvements, see the group progress but sometimes the group stagnates. We get stuck on problems that we can't fix ourselves. Management just says go to another problem but we like to see things finished but we can't. Nick – Production Group Leader

Problem solving within the team emerges here as an important source of learning in the workplace, but the benefits of it are constrained by the limited self-management delegated to teams. Problem solving and continuous improvement are an important source of team development but that development is limited by the fact that the skills so developed are formed using the standardised problem solving processes available through the global production systems and no other opportunities for learning are provided through the VET system. In a task focused environment, limited responsibility for problem solving is delegated to employees and the training system reinforces employees' limited knowledge of whole production processes. Task focussed training means that team leaders and team members do not develop a knowledge of the production system in breadth and depth. Employees have a detailed knowledge of specific jobs only. Continuous improvement competencies are recognised by the VET system but these are interpreted by the individual firm to conform with the standardised techniques specified by the global production system.

TEAM LEADER LEARNING AT WORK

Learning at work (see Table 7.) for the team leaders was associated with a range of workplace factors. Group design, job design and the work climate in the company were all associated with employee learning.

Group design was important with learning increasing with the frequency of group meetings and the design of the work group to include only those who worked together on direct production tasks. Having responsibility for quality and the training of work group members also enhanced employee learning.

Job design (Hackman & Oldham 1980) was also a significant influence on employee learning, with those employees responsible for whole work tasks and those experiencing the impact of their work on others reporting greater learning. Job redesign to eliminate fragmented work tasks and

enhance the direct experience of the outcomes of work would appear to be important for the promotion of workplace learning. Linked to this is the importance of the feedback given to employees. Those who perceived that the performance measures used in the workplace were fair and those who attached some importance to the information about performance that they were given, were also likely to report greater learning at work.

The work climate was important for employee learning. Work stress had a negative impact on learning whilst fair treatment by management had a positive impact. Learning at work was associated with employee job satisfaction and was linked to employee commitment to the company.

Table 7: Team Leader Learning Correlations

	Team Leader Learning
Group Attributes	
Group % of direct production workers	.255***
Frequency of group meetings	.190*
Job Responsibilities	
Conduct quality inspections	.206*
Train group members on-the-job	.189*
Job Characteristics	
Whole work	.298****
Task significance	.203***
Job Feedback	
Performance measures are fair	.325****
Performance information is important to recipient	.265***
Performance measures are accurate	.207*
Organizational Climate	
Employee is treated fairly by management	.226***
Job stress	-.243***
Job satisfaction	.182*
Commitment	
Proud to work for the company	.208***
Likely to stay at the company	.208***

*significant at the 0.05 level (1-tailed)

**significant at the 0.01 level (1-tailed)

***significant at the 0.05 level (2-tailed)

****significant at the 0.01 level (2-tailed)

The positive impact of workplace learning for team leaders, however, needs to be balanced against the lack of opportunities to progress beyond the top of the shopfloor career ladder. Undertaking vocational training, gaining a qualification and being involved in learning on-the-job is satisfying but that satisfaction begins to pale when you have reached the top and there is nowhere else to go.

As group leader that's it you've hit the ceiling and there's nowhere to go. There's supervisors jobs but they don't come up all that often or there's like an adult apprenticeship but really I don't see myself doing that. No, I'll just be stuck here doing this now. I mean I've done all the jobs in the factory so there's no where else to go.

Pierre – Production group Leader

... there's no real opportunities for advancement from this position. I'll be here for another 15 years unless somebody passes away. I feel that I'm in limbo. There's no light at the

end of the tunnel, there isn't even any tunnel. It's a shame. Tony – Maintenance Group Leader

The VET system in theory provides opportunities for employees to progress to higher level qualifications, but as we have seen, many learning opportunities are supplied informally and many of the skills developed by team leaders are not formally recognised. One consequence of this is that career development opportunities are blocked. Many employees have sought to have their higher skills recognised for accreditation towards advanced qualification but the individual firms in the vehicle industry have thus far shied away from so doing and this issue has become an industrial issue.

CONCLUSION

This study has found some support for the importance of the VET system in providing learning and development opportunities at work that can enhance team development. Such opportunities are structured by the production system in the firm but they are also critically structured by the VET system. Where learning opportunities are provided informally at work, where skills are developed through non-accredited training and where rewards are limited as a consequence of non-recognition, this would seem to act as a brake upon team development. The development of team self-management would seem to be constrained by the non-recognition of opportunities for learning and the informal development of skills on-the-job.

The study has also underlined the importance of work organization for employee development. Work group design, job design and the design of job feedback are all important for employee learning and skill development. The employees studied here had little experience outside of their current workplace. They had little independent or institutional skill formation and were, consequently, dependent upon the form of work organization provided by their employer, for the development of vocational skills. This work organization increasingly determines the kind of training that is provided in the Australian VET system – training that is firm specific, job specific and which limits the development of the broad-based skills necessary for team development.

REFERENCES

- Adler, Paul. & Cole, Robert. (1993), Designed for Learning: A Tale of Two Auto Plants. *Sloan Management Review*. Spring 1993. pp. 85-94.
- van Amelsvoort, Pierre. & Benders, Jos. (1996), Team Time: a model for developing self-directed work teams. *International Journal of Production and Operations Management*. 16(2):159-170.
- Ashton, David. (2004), The Impact of Organizational Structure and Practices on Learning in the Workplace. *International Journal of Training and Development*. 8(1):43-53.
- Buchanan, John., Evesson, Justine. & Briggs, Chris. (2002), *Renewing the Capacity for Skills Formation. The Challenge for Victorian Manufacturing*. Victorian Learning and Employment Skills Commission. East Melbourne.
- Cohen, Susan G. (1994), Designing Effective Self-Managing Work Teams. pp. 67-101. In Beyerlein, Michael M. & Johnson, Douglas A. (eds.), *Advances in the Interdisciplinary Studies of Work Teams. Volume 1*. JAI Press. Greenwich.
- Cooney, Richard. (1997), Training reform in the Australian automotive industry. *International Journal of Training and Development*. 1(4):259-270.
- Cooney, Richard. (2002). The contingencies of partnership. Experiences from the training reform agenda in Australian manufacturing. *Employee Relations* 24(3), 321-334.
- Curtain, Richard. (1994), The Australian Government's Training Reform Agenda: Is It Working? *Asia Pacific Journal Of Human Resources*. 32(2):43-56.
- Darrah, Charles. (1996), *Learning and Work: an Exploration in Industrial Ethnography*. Garland Publishing. London.
- Ford Motor Company (2002), *Ford Production System Requirements for Training*. Release Version 4.0.
- Goodman, Paul S., Devadas, Rukmini. & Hughson, Terri L Griffith. (1988), Groups and Productivity: Analyzing the Effectiveness of Self-Managing Teams. pp. 295-327. In Campbell, John P., Campbell, Richard J. & Associates (eds.), *Productivity in Organizations. New Perspectives in Industrial and Organizational Psychology*. Jossey-Bass Publishers. San Francisco.
- Hackman, Richard J. & Oldham, Greg R. (1980), *Work Redesign*. Addison-Wesley. Reading.
- Hackman, Richard J. & Wageman, Ruth. (1995), Total Quality Management: Empirical, Conceptual and Practical Issues. *Administrative Science Quarterly*. 40:309-342.
- Hut, Jacqueline. & Molleman, Eric. (1998), Empowerment and Team Development. *Team Performance Management*. 4(2):53-66.
- Koike, Kazuo. & Inoki, Takenori. eds. (1990), *Skill Formation in Japan and South East Asia*. University of Tokyo Press. Tokyo.
- Lansbury, Russell D. & Niland, John. (1994), Trends in industrial relations and human resource policies and practices: Australian experiences. *The International Journal of Human Resource Management*. 5(3): 581-608.
- Rainbird, Helen. (1994a), The Changing Role Of The Training Function: A Test For The Integration Of Human Resource And Business Strategies? *Human Resource Management Journal*. 5(1):72-89.
- Rainbird, Helen. (1994b), Continuing Training. pp. 334-364. in Sisson, Keith. (ed.), *Personnel Management. A Comprehensive Guide to Theory and Practice in Britain*. Blackwell Publishers. Oxford.

- Ray, Darrel. & Bronstein, Howard. (1995), *Teaming Up. Making the Transition to a Self-Directed, Team-Based Organization*. McGraw-Hill. Inc. New York.
- Sundstrom, Eric., De Meuse, Kenneth P. & Futrell, David. (1990), Work Teams. Applications and Effectiveness. *American Psychologist*. 45(2):120-133.
- Tannenbaum, Scott I., Beard, Rebecca L. & Salas, Eduardo. (1992), Team Building And Its Influence On Team Effectiveness: An Examination Of Conceptual And Empirical Developments. pp. 117-153. in Kelley, Kathryn. (ed.), *Issues, Theory And Research In Industrial / Organizational Psychology*. North Holland. Amsterdam.
- Wellins, Richard., Byham, William. & Dixon, George. (1991), *Inside Teams. How 20 World-Class Organizations Are Winning Through Teamwork*. Jossey-Bass Publishers. San Francisco.