

**Are the introduction of individual salary packages for teachers and the formation of work teams in schools viable options?**

# Japanization and the Management of Education in Australia

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## Introduction

In recent times, virtually all over the world, Japanese management strategies have become very much the "flavour of the month". This tendency has sparked off much academic debate as to the suitability of Japanese approaches to management in, especially, Anglo-Saxon cultures. For instance, a complete edition of the British, *Industrial Relations Journal* [1] was devoted to papers discussing the various arguments surrounding the supposed "Japanization" of industrial relations and work practices in Britain. One of the aims of the papers was to clarify the meanings which have been, and can be, attributed to the idea of Japanization. As Towers[2], the editor of the *Industrial Relations Journal*, remarked, in reference to the British situation:

The influence of the Japanese and Japanization within the economy is a matter of wide interest for its effects upon industrial control, industrial efficiency and industrial relations.

However, Dickens and Savage[3] have called "Japanization" a chaotic conception because it is used in a broad way while, in fact, alluding to specific kinds of

industrial practices and relations. With this reservation in mind, they have undertaken studies of the extent to which Japanese industrial relations practices have been adopted in the M4 industrial corridor, from East Anglia to the South West of Britain.

Similarly to Britain, other industrialized countries also have examined closely the approaches the Japanese have adopted with regard to their industrial relations techniques and systems of management. This is done in the hope that, by emulating the Japanese, problems of productivity and industrial unrest might dissipate. The Americans have been engaged in this examination especially with regard to the Japanese "transplants" of some of Japan's major companies[4]. These transplants have involved the setting up of factories, by such companies as Nissan and Toyota, on American soil. The debate around these companies is: how completely can the Japanese approach to management be exported to English-speaking cultures? In being involved in this debate the educational "industry", particularly in Australia, has been no different from other sectors of the economy.

In Australia, in the recent Schools Council publication *Australia's Teachers*, in the context of drawing on administrative best practices, the author advocates such practices as "more flexible and diverse work organization" and "team-work among teachers"[5, p. 1]. Moreover, the publication refers approvingly to comments made by a member of the National Board of Employment, Education and Training, Laurie Carmichael, where he asserts that:

The demand for and appreciation of quality means a re-organized work force, where human resource management is fundamental, where decision-making occurs at the level of the individual worker, where skill is applied minute by minute, where workers are involved in management through consultation and application of their knowledge and skills, and where small highly competent teams replace the production line[5, p. 3].

Carmichael's arguments on the changing nature of the workplace and the appropriate response that the administration of education should take has been of considerable influence in Australia. Many commentators have taken up a similar position to that of Carmichael's, arguing that education needs to be reorganized to accommodate the skill and knowledge requirements needed by industry in a "post-Taylorist", "post-Fordist" society, of a kind which can be typified by Japan (e.g. [6,7]). Indeed, some researchers of Japanese organization strategies argue that their work has indicated that the "Japanese model" has become accepted as international best practice in the organization and administration of work, replacing the "Fordist model" of the previous era[4]. Such remarks are indicative of the influence the "received model" of Japanese management strategies are having, not merely in the industrial sector of the economy but also in what is increasingly being referred to as the "education industry", in the political and ideological shaping of change in the administration of education. Japan

is viewed as having thrown off the legacies of the past and developed new strategies which have markedly improved the work effort of employees, productivity and the quality of the products produced.

With arguments similar to these being presented by major policy players, such as the Schools Council on the Australian scene, this article will examine several of the "best practices" of the industrial sector in Japan and their applicability to the management of education. In particular, the practice of individualized wage agreements and work teams in the form of quality circles will be explored. As part of this exploration the question as to whether they differ markedly from earlier forms of management, such as scientific management, will be broached.

### Something New or Something Old?

Following the precedents set in Great Britain and New Zealand the conservative political parties in Australia are seeking to move authority and finances to the school level with the principal and the school council being key players in their distribution. In this context, the principal would be given maximum authority including the ability to hire staff with complete control over staffing at the school level. Gude, the Shadow Minister for Industrial Relations in Victoria, has conceded that, if he came to power, there would be individual bartering between the principal and individual teachers in a school over conditions and salaries. With such individual negotiating taking place, every school, and within them, every teacher, could end up with separate, individual conditions of employment. As Gude has clearly made evident, "We'll have individual contracts. . . there are only so many dollars in the education budget, it is important that they are spent efficiently". In relation to teachers it is important that they "are rewarded properly for the work they perform, and that is all we seek to achieve"[8]. Gude went on to explain that the personal, individualized contracts negotiated with permanent members of the teaching service were a means by which the outstanding teachers who went beyond what was expected of them could be rewarded. For any future conservative government there was no doubt that the current system of uniform conditions and salary packages has got to be changed. As Gude explained, "it's not a question of taking money off the non-performer so much as that we are wanting to reward those who put the extra effort in"[8]. A similar scenario has been outlined at the federal level by the conservative opposition. In their Fightback policy document they envisage that each school and each teacher will go through the process of negotiating individualized salaries and conditions. The apparent autonomy conferred on such self-managing schools, however, would be strongly curtailed by the central determination of resources, policy and evaluation. This industrial relations scenario envisioned by both the federal and state oppositions is closely akin to the "best practice" carried out in Japan. The Nenko system of industrial relations prevalent there has been commonly erroneously related solely to a guarantee of permanent life-long

employment. In fact, it is much more than this, with the central tenet being the individually negotiated wage packages between worker and employer.

The other main facet of change in industrial relations, with allusions to Japan, which this article seeks to address is the formation of work teams. In Australia, the current moves to restructure the Australian economy over all of its sectors has sparked a wide discussion with many examples being given of the form of any restructuring which would take place. At the basis of restructuring, especially since 1988, has been the Structural Efficiency Principle (SEP) which sought to improve efficiency through changes in individual establishments. Among the various items designated by the Industrial Relations Commission as ways to enhance flexibility and efficiency was the development of appropriate consultative procedures to deal with the day-to-day matters of concern to both employers and workers. Indeed, research by Sloan and Wooden[9] found that the introduction of consultative/employee participation schemes has been one of the most favoured SEP initiatives. It would appear then that the introduction of worker participation strategies has been a major area of change within the SEP. Such a change might be seen as central in the development of a new workplace culture through which other change involving multiskilling, flexibility, broadbanding, new career paths, etc., will evolve ultimately.

The Industrial Relations Commission's quest for workplace restructuring has been taken up by numerous bodies ranging from the Business Council of Australia to the Australian Council of Trade Unions. The Australian Manufacturing Council, which straddles both employer and employee bodies, has been at the forefront in seeking a change in the way Australian workplaces are structured[10]. It claims that a major reason why Australia lags behind the rest of the world in productivity is its failure to modernize the culture of the Australian workplace in line with what is viewed as the current best practice employed by the leading industrial nations of the present day. The dominant culture which traditionally has existed in Australian work institutions is seen by the Australian Manufacturing Council as a major handicap to increasing the efficiency and effectiveness of Australian industry across all sectors. The Council asserts that a "new workplace culture" would engender a way of thinking which strives continually for a "best practice" of work arrangements.

To exemplify its argument it points to the model of Japan which seems to illustrate such desired areas of restructuring as flatter organizational structures, efforts to incorporate the ideas of workers, team-based approaches to problem solving and human resource policies fostering greater worker commitment[10, p. 58-9]. Indeed, such arguments give credence to the suggestions that the Japanese have developed new management practices which have abandoned Taylorism, turning it on its head. Yet scholars of the workplace still point to the powerful presence of Taylor's philosophy of management in Japan. For instance, Berggren[11], in a study of Japanese influences in the car

industry in Sweden, has found that, far from breaking the principles of Taylorism, the Japanese are the masters of them in the contemporary industrial world.

More specifically, in the education industry, similar sentiments to those of the Australian Manufacturing Council have been echoed in a number of recent articles[12,13,14]. Ford[12] asserts that in the current climate of restructuring, innovations in work organizations are required to meet the new demands of adaptability, flexibility, competence, commitment, co-operation, competition, accountability and responsibility. Similar to the Australian Manufacturing Council, Ford points to Japan as a model to follow to achieve these new demands. In accommodating these requirements:

Japanese organizations have well developed systems of role rotation across functions and skill, organisational information sharing and learning, small group activities and projects (e.g. quality control circles) and organisational participation processes[12, p. 212].

Bluer and Carmichael[13] in their discussion of award restructuring in teaching also point to the importance of workers in the education industry participating in co-operative groups which would make a decisive contribution to the organization of work. In doing this they refer to other nations which have been successful in transforming their ways of working through the establishment, among other things, of a new work culture. Such transformation might be encompassed, they argue, in the proposed Advanced Skills Teacher (AST) classification where the place of the new ASTs might be crucial in developing co-operative teams of teachers within Australian schools[13]. Ramsey[14], in a similar vein, emphasizes the need to reassess the changing skill requirements that teachers/workers need in the light of a changing workplace. In this context there is an increasing appreciation and demand for higher level cognitive and problem-solving skills, together with social skills which foster teamwork and leadership[14].

The most frequently referred to model of participative small groups which have been set up in the workplace has been the Japanese quality control circles. Not only have they been introduced into the industrial workplace but there is an increasing literature describing their introduction into educational institutions, particularly in the USA. However, before examining quality control circles and other Japanese management strategies it is important to locate the origins of management in Japan both historically and socially. Accordingly, this article will now briefly examine the historical construction of scientific management and the work of Frederick Taylor. It will then explore why and how scientific management has had such profound influence on management in Japan.

### **Scientific Management — Its Origins and Export to Japan**

This section of the article will discuss the rise of scientific management in the USA. In particular it will look at the

influence of Frederick Winslow Taylor in promoting the influence of engineers in the organization of work. The result was that management took on an engineering perspective whereby the engineering of people in a “scientific” and “efficient” manner became a major concern. The final part of this section examines the factors which have resulted in scientific management becoming an important element in the process of industrialization in Japan.

#### ***The Rise of Scientific Management***

While Louis Brandeis originally formulated the term “scientific management” during a railroad dispute, it was Frederick Winslow Taylor who fervently took on the ideal of scientific management, so that it has become unquestionably identified with him. As a consequence, in the administration literature, the terms “Taylorism” and “scientific management” have become synonymous.

The system of management which Taylor eventually arrived at developed during his involvement in the industrial unrest at Midvale Street. It was based on the assumption that people will come to realize what is best for them economically and act accordingly to maximize their economic benefits. Taylor argued that what workmen want from their employers beyond anything else is high wages and what employers want from their workmen most of all is low labour cost of manufacturer[15, p. 93].

In order that this rational behaviour could eventually become a part of reality Taylor proposed four types of new duties which he called the “principle of scientific management”. The first of these principles was the development of a science of work. The second was the scientific selection and then progressive development of the workmen. The third was concerned to bring the science and the scientifically selected and trained workmen together. Lastly, the fourth sought to divide the actual work of the organization equally between the employers on the one hand and the management on the other[16, pp. 40-1].

Taylor advocated that this was “the best way” of doing work, because he considered that many workers were deliberately restricting the level of production required and expected by management. Scientific management, then, is concerned with inculcating in the workplace an ethos of management’s point of view, of getting the employees to think in management’s terms. It does not concern itself with the underlying reasons for the development of any adversative social relations of work. It is concerned with the shaping and structuring of labour to the needs and requirements of capital.

With the implementation of these principles, power within the workplace shifted heavily from people on the shopfloor towards the scientific managers. In this process, work was increasingly fragmented, routinized and subjugated to management control. This occurred because, at the time, Taylor feared that even with the scientific selection of

employees the majority were so poorly educated that they could never be socialized to think scientifically as industrial engineers. The consequence was that scientific management entailed, according to Drucker, “the analysis of work into its simplest elements and the systematic improvement of workers’ performance of each of these elements”[17, p. 280].

Management, though, and Taylor in particular, was representative of a specific group, engineers, who were keen to establish themselves as a service class. Thus scientific management arose as the manifestation of a profession, the engineers, seeking a new class location. Urry[18,19] argues that scientific management was an important element through which the nascent service class of engineer managers sought to establish themselves in an intraclass between labour and capital. The declining prospects for engineers at the turn of the century caused them to be increasingly interested in management. To improve their status in both financial and social terms, the leaders of the engineering profession argued that they would have “to leave the engineering of materials and enter the engineering of men”[20, p. 41].

In this way, the ideology and technical approach developed through scientific management was a response to the changing view which the engineering profession had of itself. It saw itself as best surviving the decline in its fortunes by interpolating itself between workers and owners and solving management problems through engineering techniques. This intrusion of engineer managers into the work process was not only initially opposed by labour but also by capital. Indeed Taylor, in his “Testimony before the Special House Committee”[16, p. 43], emphasizes the opposition of capital to the principles of scientific management. The eventual victory of the ideology and techniques of scientific management and their prevalence to the present day was a victory for the new class of managers rather than capital over labour. Thus the victory of scientific management not only had implications for the way work was organized but it also transformed the very basis of the structure of class relations in industrial societies through the emergence of an engineer/managerial or service class with great power.

Meiksins[21,22] similarly has suggested that the collapse of the small engineering workshop was a factor which caused many engineers to attempt to redefine their position within the larger organizational structures in which they now found themselves. Although they were generally supportive of business ideology, the engineers who fostered scientific management were critical of top level management and proprietors “interfering in ‘engineering’ questions and sought to carve out an autonomous niche for the engineer within the large corporation”[21, p. 410]. Engineers sought ways not merely to maintain the work effort of people in the newly emerging factories but to raise it significantly.

In this way, with their gradual assertion of supremacy in the workplace, the engineer-managers perceived themselves as a professional bureaucratic corps developing an important programme of modern management embodying both an ideological basis and a set of management practices. These beliefs and practices which were being developed around new structures of control and integration[23] not only took hold in America but were also eagerly taken on board in the newly emerging industrial country of Japan.

### **The Establishment of Taylorism in Japan**

Scientific management had considerable impact in Japan almost immediately after Taylor had published his *Principles of Scientific Management* in 1911[24]. The virtues of the new approach to management were widely disseminated in Yukinori Hoshino’s book *Kengaku Yoroku* (A Report on Observations) (1912) which reported on travels and observations in the USA and Toshiro Ikeda’s book *Tema wo Habuku Hiketsu* (Secrets for Eliminating Futile Work and Increasing Production) (1911). The latter book especially had a profound effect on the business world in Japan, selling over a million copies[24].

At the forefront in the promotion of scientific management in Japan was Yoichi Ueno who, following on from Taylor and his disciple Gilbreth, wrote the seminal paper “On the Efficiency” in 1912. Soon after, in 1914, Ueno published *Shinrigaku Tsugi* which pointed to the psychological links which the management approaches of Gilbreth stressed[25]. His interest in Gilbreth’s work, in particular, led on to a close relationship between the two men. This relationship culminated with the two meeting after Ueno had been sent to the USA by the *Kyochakai* (Society for the Promotion of Co-ordination of Capital and Labour) in 1919. The trip occurred after influential pressure from the prestigious Kyoto Imperial University. Not only did Ueno meet and work with Gilbreth in the USA but he also met other proponents of scientific management such as Emerson with whom he attended the “Society of Efficiency International” in Detroit during 1922. On his return to Japan in 1922 Ueno helped to set up the Research Institute of Industrial Efficiency which he was to head for 20 years[25]. The next year, 1923, the National Japan Federation of Efficiency Engineers was initiated to disseminate scientific management’s views on industrial efficiency and industrial management. In fact, at this time, the term “efficiency” had preference over the term “management” in the business world, so that “efficiency” experts was a more favoured term than “management” experts. Finally, in 1925, Ueno was chosen as the first president of the Japanese branch of the Taylor Society[25].

Nakase[24] links the powerful influence and penetration of scientific management into Japanese views of work to the rise of the *Zaibatsu*. The years following 1910 were crucial in the incorporation of the most important of the *Zaibatsu*. It was during these years that such powerful groups as Mitsui, Yasuda, Mitsubishi and Sumitomo



established themselves as holding companies. These *Zaibatsu* wholeheartedly took on the ideology and practice of scientific management as they became obsessed with concerns for efficiency in their business operations. Their fanaticism for efficiency came about as they determined to make a clean break with their quasi-feudal ties and identify themselves with the most up-to-date ideas on management emanating from the United States. The result, Nakase[24] reports, was that Taylorism, in its application in Japan, stressed improvements of efficiency, increasing profits, the reorganization of the control of work, the intensification of labour, and the rationalization of supply and distribution.

With such historical underpinnings of Japanese approaches to the management of work, it is little wonder that many scholars of administration point to the degree of refinement and sophistication which scientific management has attained in Japan. Indeed, in this vein, Schonberger has proclaimed that:

I have been astounded by statements I have heard from some American "authorities" to the effect that the Japanese reject Taylorism, supposedly in favour of a more humanistic approach. Frederick W. Taylor, an American, is the father of IE/Work study circa 1900, but the Japanese out-Taylor us all — including putting Taylor to good use in QC circles or small group improvement activities[26, p. 193].

Keeping in mind the historical importance of Taylorism in Japan this article will now briefly look at two aspects of Japanese management strategies. These aspects relate to the individualized, negotiated salary packages of the *Nenko* system and the quality circles, small group participation schemes. These two have been chosen as they are frequently cited as being appropriate paths to follow in any restructuring of the administration of education.

### The *Nenko* Employment System

The word *Nenko* embodies a range of meaning which implies more than a system of employment by seniority. While *nen* refers to age or length of service, *ko* couches any sense of the word in terms of merit or ability. Importantly the individualized aspect of the *ko* in an employee's personal assessment and wage contract is a major factor in determining the future prospects of any employee in the company. The assessment of an employee's worth, done by a superior, can include criteria such as co-operativeness, trainability, work motivation, potential ability or any other aspects which management might deem to be crucial in the attainment of the company's goals[27]. In other words, a worker has two dimensions to his/her pay which together make up the overall salary package. One component is the incentive pay rates, negotiated through the company union, traditionally in spring, on an enterprise-bargaining basis when wage agreements are negotiated for all *Joyo* or permanent employees. The other part is the basic

component which is negotiated between the employee and the company. The resultant situation gives rise to an extremely individualized salary structure. The incentive pay makes up about 50 per cent of a worker's monthly pay and is linked to the efficiency and productivity of particular work areas. The basic component of the salary is highly individualized with each worker being differently assessed and subjectively evaluated by their superiors. As Ikuro Takagi has commented:

In Japan the wage rate for a worker in the respective enterprise differs completely from other workers, even if they belong to the same age, or the same length of service, having the same degree of skill and efficiency, etc. Individual wages are absolutely "individual" to workers[28, p. 137].

Through its ability to sever the link between employees and uniform salary rates, management in Japan has been able to generate an extremely strong ethos of competition among its employees. The highly individualized salaries negotiated have the effect of destroying any sense of solidarity among employees. Dohse *et al.* have observed that employees, in order to resolve satisfactory salary negotiations, "must continuously demonstrate as individuals their usefulness to the firm through diligence, docility, and flexibility"[28]. Indeed Pollert[29], in her examination of current moves towards greater flexibility, shows that many of the so-called best practices from Japan, such as personalized pay rises and incentives, are in fact classical Taylorist mechanisms.

The establishment of incentive components of individually negotiated salary arrangements closely parallels the principles of scientific management as espoused by Taylor. He argued that "in order to have any hope of obtaining the initiative of his workmen the manager must give some special incentive to his men[15, p. 33]. Taylor suggests that this incentive can not only be incorporated into the promotion system but also through higher wages for individual workers. Accordingly incentives in an individualized wage form could come about "in the form of generous piece-work prices or of a premium or bonus of some kind for good or rapid work"[15, p. 34]. Through such a process Taylor hoped to capture the "initiative" of employees which consists of their goodwill and acceptance of management; their willingness to work hard and the placement of their ingenuity in the service of management. These aspects of the individual worker's performance, tied to the increasing control of management, would make scientific management more efficient than past methods. In these terms Taylor was able to claim that, "we are not dealing with men in masses, but are trying to develop each individual man to his highest state of efficiency and prosperity"[15, p. 43]. Accordingly, similar to the present day Japanese system, every worker should end up with a completely distinct and individual wage packet.

Taylor claimed that the extra bonus received by workers was a vital aspect of scientific management in that, by this

means, workers came to accept the right of management to manage while being conditioned to “carrying out orders” (in [30, p. 105]). Linked to the concept of highly individualized rewards was the point that Taylor felt that an essential part of scientific management was a concern to concentrate on the individual worker. In line with this philosophy he directed his efforts towards scientifically measuring how much each employee in the firm could accomplish. He believed that the fostering of personalized pay rates and productivity goals were important factors in the undermining of any group or union solidarity which would emanate from uniform conditions and salaries. In this vein, Taylor wrote that “personal ambition always has been and will remain a more powerful incentive to exertion than a desire for general welfare”[31]. Accordingly, an essential part of his policy was the individualizing of the workplace to stimulate each employee to give their maximum effort. He bitterly condemned any form of solidarity which resulted in uniform conditions whereby “misplaced drones” were able to loaf around yet still get the same money as more energetic employees[15]. Similarly Gilbreth, Taylor’s disciple who, as we have seen, was important in establishing scientific management in Japan, argued strongly that the individual should be the only unit of analysis in the workplace. This meant that tasks should be measured, assessed and rewarded on an individual basis. Indeed, the traditional methods of organizing work were roundly castigated for treating all employees as the same and not paying sufficient heed to personal ambition. To foster the ambition of each employee Gilbreth encouraged them not only to compete against other workers but also against themselves in the workplace. A constant analogy which was used to stimulate workers in this direction was the competition associated with various sports such as athletics and golf[32]. Indeed such scientific management principles are perpetuated today not only in the Japanese workplace but with such events as the “Skill Olympics”.

By the adoption of personalized salary packages, negotiated in a “scientific” manner with management, educational systems may not be merely incorporating the “best practices” of organization and management from Japan but simply recycling the best practices of 80 years ago albeit in a more subtle and sophisticated form. In similar fashion to the principles of Taylor, Turnbull[33] argues that Japanese management has created an independent structure of wages which promotes individual ambition and competition among the workforce. Turnbull suggests that because of the personalized negotiation of wages in Japan in the workplace individual wages are, as a consequence, absolutely distinct and individual.

### Quality Control Circles

As has been suggested in this article, as with many of the Japanese management techniques which are currently seen as a solution of the West’s productivity problems, “quality control circles”, or just “quality circles”, were

imported from the USA. They were advocated by American advisers during the restructuring of Japanese industry after the Second World War. Eventually they proved much more successful in Japan than America, as the Japanese quickly discerned the potential that the formation of such groups would have in lifting productivity (see[34]).

Quality circles are small (3-15) groups of people who meet at regular intervals to identify, analyse and attempt to solve the company’s or institution’s problems. Usually the people come from similar areas of the workplace and their main concern is the solution of problems arising from their particular areas of work. While the primary direction of their energies is towards solving problems related to quality, other issues dealing with productivity, costs, morale, etc., are considered. But in similar fashion to the salary structure, competition underlies the group. Briggs[35] relates this ethos of competition to each worker’s *giri* or sense of fundamental duty. Not only is there pressure on each individual worker to enhance or at least maintain his or her own personal work performance but also to better or at least match the contributions of other members of the group. Briggs[35] describes how each week the suggestion rates for each worker are posted by the company’s management. She suggests that *giri* engenders a sense of shame in those individuals who do not match the number of suggestions from other members of the group. In fostering this sense of duty and even indebtedness, the quality circle is seen as a means whereby communication between employees and management might be facilitated. To this end the participants in a group make a presentation to the top management where their projects and solutions to any pressing organizational problems are outlined (see[36]). However, in dealing with these concerns Koike[37] suggests that three attributes are necessary. First, the employees need to be able to utilize problem-solving techniques such as Pareto analysis, check sheets and cause and effect diagrams. Second, to achieve the skills needed in these problem-solving techniques a reasonably high education and training level is required. Third, employees should have a good understanding of how their organization functions. “Thus to be able to engage in effective QC activities workers have to understand the production process in a wider sphere even than their own workshop”[37, p. 153].

Wood[38, p. 454] argues that through this process of problem solving each individual worker becomes an industrial engineer and “underlying the participation of workers in industrial engineering is the conception that there is no given fixed production function”. Thus, Wood concludes that a distinctive feature of the Japanese strategies of worker involvement is the quest to get every employee to think like an industrial engineer. To this end, Wood bluntly writes that “quality circles are orientated towards conventional managerial goals”[38, p. 451]. It has been this ability to get the majority of the workforce to think as industrial engineers that has prompted such

eminent scholars of the Japanese workplace as Schonberger[26] and Cole[39] to argue that the Japanese have "out-Taylored" the rest of the industrial world. Indeed, they suggest that the Japanese have refined and honed the principles of scientific management beyond anything that Taylor could have hoped for at the start of this century. Educating employees to think and behave as industrial engineers has generated as a consequence one of the major cost-saving aspects of quality circles. In endorsing the link to Taylor, Greiner[40], after his study of quality circles in the USA, has noted that Taylor was not just about the formulation of strategies like time and motion studies. Rather these were incidental to his overall conceptualization of a scientific approach to the management of work whereby the workforce would be controlled by the detailed, scientific study of the social dynamics of production. Indeed, Robbins[41] has pointed out that the application of quality circles to all facets of industry has been attractive to the upper levels of management because it markedly increases their control while giving an impression of it being lessened. In addition, senior management has been attracted to the strategy as an approach which does not require great organizational change or large investment. Wood *et al.*[42] note that the most pronounced organizational cost-saving outcomes of quality circles are due to the development of problem-solving techniques among the various members of the groups. They argue that "groups consistently outperform individuals on these types of problems and, therefore, we would expect QCs to outperform the individual supervisors, managers, and staff members who have traditionally dealt with the problems"[42, p. 45].

As the Japanese economy, especially its industrial sector, has increasingly dominated the world scene, organizational leaders have sought to study and emulate the managerial strategies employed by the Japanese. In an attempt to reverse the relatively poor economic performances of countries like Australia, Great Britain and the USA it has become commonplace to lay the blame of the poor economic and organizational performance on a failure to adopt Japanese managerial strategies. This label of failure has been felt not only in the industrial sector but also in the educational sector. Indeed, there is a burgeoning literature emanating from the USA on the implementation of the "new management ideas" from Japan as a solution to the perceived crisis which is affecting the education system.

### Quality Circles in the Administration of Schools

Bonner[43,44] has detailed the introduction of Japanese management strategies, especially quality circles, into schools in the State of Michigan in the USA. He argues that the implementation of these strategies was prompted by the continuing crisis in public education where public confidence was declining in the system and the administration of schools was marked by adversarial relations with aggressive confrontation between the

various bargaining groups. Bonner indicates that quality circles were introduced into schools with the goal of, first, collectively searching for ways to improve efficiency and product (student) quality. Second, he asserts that there was a need to improve communication with the goal of generating harmonious, co-operative relations between the former warring parties. It was hoped that the ideal of consensus and unit of purpose would replace the antagonistic relations existing between the teacher unions and school management. However, while the quality circles are seen as bringing about a sense of co-operative effort towards shared goals they are not seen as a way of resolving industrial relations matters. Indeed Bonner stresses that staff quality circles have been admonished not to deal with such contract items as pay, insurance or benefits[44]. As noted above, the participants have to take on the perception of the industrial engineer, where the focus of concern is increasing efficiency, raising productivity, seeking solutions to problems arising in the organization, removing bottle-necks and generally fostering a productive working relationship between the teachers and the school administration.

Aquila[45] also points to the benefits accruing from a sense of co-operation and commitment to a common purpose which quality circles bring to the administration of schools. Moreover, he claims that where teachers are involved in problem solving and making decisions to improve the school's efficiency there is an improved organizational climate and student performance in the school. Thus the general tone of the school benefits from the quality circle's constant cycle of problem identification and creative problem solving. More recently, Lenmark-Ellis[46] has suggested that not only will the tone of the school administration be improved with quality circles but also they can be used to advantage in the classroom. In arguing her case, she points to their use in Oregon State University classes and their commencement in nursery schools in Japan. She enthusiastically argues that:

The application of the quality circle (QC) to the classroom may well wipe out the traditionally competitive group situation — and initiate the most productive and enjoyable group dynamic that schools have ever had[46, p. 32].

Jones and Villines[47], in reviewing research into the implementation of quality circles into schools in the USA, assert that it appears by its very definition that quality circles type management is the natural style of management for education. To support their argument they point to the use of quality circles in Indianapolis where the school administration tried, through the quality circles, to do away with any adversative relations. Teachers meet weekly in small groups to brainstorm how their teaching and students' programmes could be more efficient and effective. The groups then present their recommendations to the principal who, after acceptance, investigates how they are related to district policies and the availability of resources. Jones and Villines conclude that "Japanese management would seem to be a way to help teachers

do their job better and with more satisfaction” [47, p. 250]. While completely supporting such a conclusion, Rhodes [48], in a recent paper in *School Administration*, seeks to go further. He emphasizes the point, which is at the base of this article, that the core strategies underpinning the Japanese methods of administration can be traced back to traditional American beliefs and techniques. In particular, he suggests that school administrators should study closely how the Japanese have applied to their practices the beliefs and strategies of traditional management consultants such as W. Edwards Deming. Through the application of this process, teachers and education systems would become more aligned, increasing intrinsic motivation so that teachers would care enough to work harder. These sentiments have also been endorsed by Hunnicut [49] who claims that the use of quality circles in educational organizations can enhance educational productivity and quality levels of teaching. These can be achieved, he argues, through the school administration and teachers becoming an integrated unit where problems are eased and a team spirit is created. In homing in on educational productivity, Nadler [50] makes the telling point that productivity in this context differs from mere increases in production by virtue that the inputs are constant. That is, productivity increases by getting more from the existing human and material resources in the organization. The resultant intensification of work is one of the problems which critics of quality circles have discerned. This factor seemed important in Sherman’s [51] research on quality circles in Texas schools where participation did not meet teachers’ needs for achievement, recognition or growth. Accordingly, the article will now turn from the generally euphoric endorsement of quality circles which educational administrators have given to some of the critiques emerging from the industrial sector.

### **The Failings of Japanese Management Strategies in the Industrial Sector**

In Britain, as in other countries, a number of problems have arisen with the attempts to introduce Japanese management practices into the workplace. For instance, Dale and Hayward [52], in a study of the failures of quality circles in companies in the UK, suggest a number of factors which led to their demise in the UK. These factors include the coldness of top management and unions to the innovation. Second, was the lack of time available to the leaders to prepare and organize the meetings. Last, there were problems with the lack of co-operation from middle and first-line managers. Consequently, while the preceding section of this article has highlighted the favourable attributes of quality circles as part of a new workplace culture embodied in any restructuring of the education industry, it is evident that some labour process scholars are more sceptical. Indeed, comparison has been made between quality circles and Japanese management strategies in general and earlier fads such as the “job enrichment” programmes of the 1970s. Wood *et al.* [42]

note that frequently a new approach is taken up without thought, only to be dropped or allowed to disappear quietly when it fails to realize its expectations.

Dunford and McGraw’s [53] research into quality circles at Reckitt and Colman’s Pharmaceutical Division in Australia seems substantially to support such fears. Initially the company formed eight quality circles. However, after about four years they had collapsed. Dunford and McGraw suggest that this occurred for a number of reasons. First, there was a decline in ideas for new initiatives. Second, the pressure of work, especially for engineers, became too great. Third, it was difficult for supervisors and workers to fit in the meetings. Fourth, the supervisors resigned from the circles because they were uncomfortable in their role. Fifth, there were not enough resources available to meet the demands of the circles. Dunford and McGraw conclude by stressing that a major difficulty was that management and employees saw the circles from different perspectives. The demise of the circles was of little concern to management who had viewed them as a means to generate behavioural change in the workers. The employees were bitterly disappointed as they saw the circles as a means whereby genuine change could be made in their work environment through their involvement in the decision-making process.

Rinehart in a study of quality circles at the General Motors Diesel plant at London, Ontario, found support for those scholars who link the establishment of quality circles to the ideology of Taylor’s scientific management. He suggests that the QCs are an attempt by management to appropriate the knowledge of employees to improve productivity and profitability: “Workers... would exercise their initiative and ingenuity to pull together with management to promote productivity” [54, p. 76]. He argues that the basis of the development of these quality circles “is to induce workers to assume a managerial perspective on what constitutes a problem” [54, p. 82]. Through this process the legitimate concerns of management relate to tapping the employees’ knowledge as to the most efficient means of lifting productivity; achieving maximum effort and output; meeting scheduled deadlines; and eliminating waste and surplus costs. However Rinehart found that the ideas coming from the circles overwhelmingly were of benefit to the workers and not to management. Prominent were issues of health and safety which would have meant increased expenditure by management. Accordingly, the decisions coming from the circles were side-tracked, delayed and subverted, leading to, as at Reckitt and Colman, the disillusionment of the participants in the circles. Lever-Tracy’s [55] study of employee involvement groups at Ford Australia presents a similar picture. The employees regarded the groups with suspicion, as a management strategy. She discovered that while the groups may bring some benefits they do not involve any fundamental change in the structure of work “or contribute any major step on the road to democracy at work” [55, p. 195].



Berggren[11] in a study of quality control circles in the Swedish vehicle industry has succinctly summed up what many researchers have found. He concludes from his research that "the intentions are not to change the hierarchy of authority (but rather to strengthen it, especially the first line supervisors) or encroach on traditional management prerogatives"[11, p. 190].

The strengthening of management at the expense of the union has been pointed out by Greiner[40]. His research at Ethicon-Albuquerque, in the USA, indicated that management used quality circles in an attempt to increase its control over the attitudes and behaviour of the employees, while also seeking to reduce the power of the unions. A similar finding occurred in Tai's[56] recent study of Matsushita Electric Industrial Company (National, Panasonic brands). Here quality circles had been installed to counter any incidents which might have caused confrontation between unions and management, keeping any employee involvement within the clearly defined parameters of management.

### Conclusions

As a final comment it should be clear that the implementation of managerial "best practices" from Japan, be they individually negotiated salary packages, quality circles or other employee involvement groups, is not unproblematic. This article has explored the links between Japanese management strategies, Taylorism, and proposed changes to the administration of education. In reflecting on those links, it is wise to recall Cole's argument that "Japanese managers have achieved a more thorough-going implementation of scientific management to an extent that its founder, Frederick Taylor, could not even have imagined"[39, p. 23]. Pollert[29] has endorsed such sentiments recently arguing that work teams, similar to those of the Japanese, operate on the basis of the satisfactory internalization of Taylor's principles. Accordingly, the teams incorporate aspects of competitive individualism which are reinforced by close supervision and strict appraisal[29, p. 21]. Apart from the completely individualized wage system and the appropriation of worker knowledge through quality circles, Wood[57] also points to the highly sophisticated (scientific) selection of workers and the establishment of "weak" trade unions in Japan as echoing Taylor's management philosophy. In examining the debate over Japanese approaches to management, this article has but merely scratched the surface of a range of perspectives associated with quality circles and other management strategies. It would appear from the research that any changes in educational administration which follow the Japanese model may be of more immediate benefit to management in the individualization of the workforce and the appropriation of its knowledge. However, while this conclusion seems to be basically correct, the implementation of group work in particular may provide a contradictory niche through which general workplace participation and genuine workplace democracy might develop in an industry such as education. For while quality

circles in Japan are basically concerned with the management and intensification of productivity, they do involve employees in the solution of workplace problems, albeit in a circumscribed form of autonomous participation. From such a position, employees may get a taste, although initially very limited, of power in the decision-making structure of the organization. This position does not herald the establishment of workplace democracy, as Lever-Tracy[55] has indicated. For as Cole[39] has reaffirmed recently, the setting up of work teams in Japan has nothing at all to do with greater participation or democratic practices. He illustrates that it "does not suggest a voluntaristic process in which workers organize to obtain greater participation for themselves or choose to democratize the workplace. . . the focus initially was on engineers aiming to solve quality and cost problems in the workplace"[39, pp. 20-1]. However, while this may be true, in the Western context they may nevertheless provide an impetus through which there is a genuine rebalancing of power in the organizational decision-making processes.

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