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Training and Development needs of quality managers

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TRAINING AND DEVELOPMENT NEEDS OF QUALITY MANAGERS[1]

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ABSTRACT
There is widespread agreement that adequate, appropriate training of quality managers is essential to the development and implementation of effective quality management systems. What form this training should take is problematic given the complexities of the quality managers' roles and the uncertainty surrounding the future of quality management: it is not yet clear whether it will survive as a discrete field, be absorbed by other systems of management or disappear entirely. This study reports on a survey of 235 Australian quality managers to determine their perceptions of their training and development needs, the extent to which these were being met, and their views on the future of their discipline. We found that the training and development received by the respondents was unsatisfactory in many respects: there was a general lack of systematisation, while most programs were short-term and delivered by a fragmented set of providers. Many managers had received no training at all in the past five years. While the respondents were generally satisfied with the training they had received, there was evidence that their insight into their own needs was imperfect. The respondents were divided between those who thought quality management would remain a discrete field and those who saw it being absorbed by other management systems. The challenges of developing an appropriate training and development regime in this environment are discussed.

KEY WORDS
Quality, Management, Training, Professional Development, Australia

INTRODUCTION

Whereas the 20th century has been described as the "century of productivity", predictions are being made that the 21st century will be regarded as the "century of quality" (DeFeo & Janssen, 2001). However, the shape that quality management may take is, as yet, very unclear. Waddell and Mallen (2001) concluded that there are four main possibilities:

1. It will remain much the same, that is, an essential function performed by specialists within the organisation;
2. Its functions will be outsourced/subcontracted to specialists outside the organisation;
3. Its functions will be absorbed into some integrated management system;
4. It is just a fad that will eventually be confined to the dustbin of history.

While there is some evidence that quality management is being increasingly integrated with other organisational processes (Neergard, 1999; Redman & Grieves, 1999; Waddell, 1998a) this has not yet led to the demise of specialist quality managers.

We know that quality managers have a demanding and complex role. They are typically responsible for the implementation of the quality management policy and systems: in addition, they are expected to motivate others to adopt the philosophy, tools and processes of quality management. In many cases, they provide a vital link between senior management and non-managerial staff (Waddell, 1998b).

Occupying as they do positions of leadership, quality managers require generalist managerial capabilities as well as skills appropriate to their specific responsibilities. These include:

- Understanding the processes and business issues of the organisation and ability to communicate with all levels of it;
- Acting as a resource to the management team;
- Ability to understand, advocate and teach quality;
- High level interpersonal skills;
- Ability to demonstrate and motivate others to solve their own problems;
- Flexibility; and
- Ability to drive change (Bell, McBride & Wilson, 1997)

The complexity of the role and its importance in the improvement of quality outcomes raises questions about the learning and development processes most likely to enable quality managers to fulfil their functions effectively.

Research in the United States has identified the lack of continuous training and education as the most important barrier to the successful implementation of quality management (Masters, 1996). Similarly, a British study found a strong relationship between managers' assessment of training adequacy and their perceptions of the success of their quality management programs (Wilkinson, Redman & Snape, 1993). Yet, there has been little research to date on where and how quality managers acquire the specific skills needed to fulfil their unique organisational role. Given that one of the primary objectives of every quality system is to increase customer satisfaction, it is remarkable that there has also been little research into how quality managers perceive their own

training and professional development needs, or the quality training needs of the organisation as a whole.

While there is a substantial literature on the personal and professional development needs of managers and employees generally (Bell et al., 1997; Dodgson, 1993; Field & Ford, 1995), the specific development needs of quality managers have not been considered. There has thus been an implicit assumption that their learning needs are very similar or identical to those of other managers.

While a recent European survey (Mathews et al., 2001) surveyed aspects of the quality training provided to employees generally, the study examined "Quality Staff" as a sub-group and did not provide information on quality managers, per se. That survey indicated that fully a third of quality staff received no training, those that did received a wide assortment of mostly traditional approaches such as in-house seminars and external short courses.

In conclusion, little is known about the training and professional development needs of quality managers except that they are considered critical to the effective implementation of quality management programs. It follows that if the current training and development regime does not adequately equip quality managers to perform their roles competently, this may contribute to the failure of many quality management programs and systems. Such failures would increase the likelihood of quality management being consigned to the "dustbin" scenario described above.

Given the dearth of knowledge this study is largely exploratory. It seeks to collect basic information from quality managers about their roles, responsibilities and requirements for training and development; and how well those requirements matched their actual experiences. Some working hypotheses were suggested by an earlier survey of quality managers (Waddell, 1998b) and five case studies (Waddell, 1998a):

1. Profile: The typical Australian quality manager is a relatively junior and inexperienced tertiary educated male aged 35-45 who is not a member of a professional quality association, does not make extensive use of technical quality related tools, is pessimistic about the future of quality management as a profession and who typically has responsibilities other than quality (most commonly either human resources or a technical area). This is in contrast to the profile of quality managers in the USA, who are reported to be more senior and more likely to specialise in quality management (Richardson, 1997).
2. Diversity of needs: Because of the heterogeneity of Australian quality managers, their personal and professional development needs will vary significantly according to their experience, education and functions performed.
3. Diversity of provision: The training and development provided to Australian quality managers comes from a very diverse array of sources that includes in-house and external consultants, three professional associations, and a variety of educational institutions.
4. Incongruence between needs and provision: While both training and development needs and their provision are diverse, the diversity of provision has arisen serendipitously rather than as a systematic response to addressing needs. Many Australian quality managers operate in environments where quality management is performed more for reasons of self-promotion or compliance

than as a means of improving organisational performance. As a consequence, the training and development needs of quality managers are often neglected.

5. Future of quality management: One of the goals of this study was to explore how quality managers themselves saw the future of quality management. Given the absence of previous research, no predictions were made.

METHODOLOGY

Sample

The sampling frame comprised the *JAS-ANZ Register of Accredited and Certified Organisations* (Standards Australia, 1996). The sample consisted of 1000 organisations randomly selected from the *Register*. A total of 235 fully completed and usable questionnaires were returned. This represented a response rate of 23.5 per cent, similar to those obtained in comparable organisational studies (e.g. Mathews et al., 2001; Sohal & Terziovski, 2000). Caution should be exercised when interpreting the results since it is probable that the respondents are not truly representative of the target population: they may, for example, have higher levels of interest in and awareness of quality management issues than non-respondents.

Survey Instrument

The survey instrument consisted of 27 items. The first 12 items collected basic information about the respondents' age, sex, educational qualifications, professional affiliations and their organisation and their role in it. Items 13 and 14 asked the respondents to rate on a five-point Likert type scale their perceptions of the importance of training as a factor to improve quality and how important they thought their organisation regarded it. Other questions sought more detailed information about respondents' training and development experiences. Respondents were also asked how they saw the future of quality management in the year 2010.

Analysis

Data analysis was performed in SPSS. Given the exploratory nature of the study, this was limited to simple descriptive statistics and crosstabulations of selected variables with age, sex, education and industry.

RESULTS

Profile

Reflecting the random selection, all major industry groups were represented in the sample, with the largest numbers from manufacturing (25 per cent) and property and business services (18 per cent). As predicted, males greatly outnumbered females, comprising 77 per cent of the sample. As with the earlier survey, female quality managers were concentrated in service industries such as health and education, while they comprised only about 11 per cent of those in manufacturing and construction.

Of those whose educational level could be defined accurately, 68 per cent held post-secondary qualifications; comprising 18 per cent whose highest qualification was a diploma, 35 per cent a bachelor degree and 15 per cent a higher degree. The median age of the respondents was 44.

The sample was somewhat more experienced than predicted, with two-thirds having been in their organisations for more than five years. However, only 27 per cent had been

in their current positions for more than five years. Approximately two-thirds had responsibility for quality in the whole organisation, while the remainder had responsibility for a smaller unit. As predicted, only a minority (33 per cent) of the sample were dedicated quality managers, while the others had additional managerial responsibilities, most commonly administration or general management (19 per cent). In contrast to the earlier survey (Waddell, 1998b), relatively few respondents had responsibilities in human resources or personnel (3 per cent).

Diversity of Needs

The respondents were asked to rate their perceptions of their training needs in both the short-term and long-term by open-ended responses. The responses were, as predicted, very diverse. The most striking finding was that half the sample made no response to the question about short-term needs, while 58 per cent made no response to the long-term item. These people were presumably either unaware of their own needs or considered their past and current training to be sufficient preparation for the rest of their careers. In regard to their short-term needs, 17 respondents nominated training in general management, 16 nominated computer skills while 14 nominated the new ISO 9000 standard. For long-term needs, the most common response was a higher degree (26 respondents), respondents perhaps considering that such a qualification would advantage them in the job market. The next most commonly nominated need was for training in general management. Relatively few respondents nominated leadership or people skills in either the long-term or short-term. All the persons who nominated people skills held a degree or higher qualification.

The respondents were asked how they determined their requirements. The most common responses were a performance review (37 respondents), self-perception (29) and a training needs analysis (28).

In addition, respondents were asked how their training needs differed from those of other functional managers. The most common response (54.7 per cent of respondents) was that their needs were no different. The next most common responses were a need for more quality-oriented tools and skills (10.6 per cent) and quality oriented principles or philosophy (6.4 per cent).

The respondents were also asked what were the main restraints for their planning for training. By far the most common response was lack of time and money (42.1 per cent) or lack of time (11.1 per cent). Only 13.2 per cent cited workplace or management issues, while only 6 per cent cited supply issues such as course availability and suitability.

Diversity of Provision

As noted above, there was considerable diversity in education received. We expected this to be the case also with training. The respondents were asked to nominate up to five training courses they had undertaken in the past five years. The responses were classified into 23 categories as listed in Table 1.

[Take in Table 1 about here]

Between them, the 235 quality managers had undertaken 483 courses over the past five years. The most frequent response was some type of general management course,

nominated by over a third of the sample. The next most common were quality practices and principles (29.8 per cent), internal auditing (25.5 per cent), quality tools (23 per cent), technical/software (19.1 per cent) and occupational health and safety (19.1) per cent. The next most frequent response was no response (18.3 per cent). It may be inferred that this group had undertaken no training in the past five years. There were no significant differences between the types of courses undertaken by members of professional associations and others.

As predicted, the training had been provided by a variety of sources, the most common being external consultants (43.9 per cent of courses), the Quality Society of Australasia (16 per cent), educational institution (12.8 per cent) and internal (9.5 per cent). The remainder were provided mainly by a large variety of industry and professional bodies. Most of the courses were of short duration; 28.7 per cent were of eight hours or less, while 85.5 per cent were of 40 hours or less.

The survey also asked the respondents whether they were currently undergoing a training course. Fifty of the respondents (21.3 per cent of the sample) responded affirmatively, with 46 of these undertaking one course and the remainder two. The most common courses undertaken were general management/risk (22.2 per cent of courses), occupational health and safety (18.5 per cent), quality tools (11.1 per cent) and specific job skills (11.1 per cent). The courses also tended to be of short duration, with 27.1 per cent less than 8 hours, and 60.5 per cent of less than 40 hours. The courses were most commonly conducted by an external consultant (32.7 per cent), an educational institution (32.7 per cent) by the respondent themselves (16.3 per cent) or by internal staff (12.2 per cent).

While 50 per cent of the sample belonged to one or more professional associations, relatively few belonged to ones specifically dedicated to quality. Diversity was very marked, 70 associations being nominated in total (multiples permitted). The most common affiliations were with the Institute of Electrical Engineers (13 per cent), the Quality Society of Australasia (9 per cent), the Australian Institute of Management (7 per cent) and the Australian Human Resources Institute (6 per cent).

Mismatch Between Needs and Provision

As discussed above, effective quality managers need the high level interpersonal skills needed to motivate others and to drive change. Our survey indicates that relatively few quality managers have received training in these areas A substantial number of quality managers have received no recent training of any description, while many others have only undertaken very short programs.

While 89 per cent of respondents considered training to be an important or very important factor to include quality, this was in stark contrast to their perception of how their organisations rated its importance (46 per cent). This lack of perceived support may help to explain the finding that 68 per cent of respondents had not provided any training to other employees in the past five years. These findings suggest a low degree of integration of quality systems into the organisational fabric.

Nevertheless, the survey respondents appeared reasonably happy with the training they had received. They were asked to rate the effectiveness of the courses they had undertaken in the past five years on a 3-point scale. Most courses received a score of

"excellent" (46.4 per cent) or "good" (46.6 per cent) while only 6.8 per cent were rated "poor".

The Future of Quality Management

The free-form responses of how respondents saw the future of quality management in 2010 were coded initially into 19 categories by an experienced coder with no knowledge of the four scenarios discussed above, then compared with the four scenarios. The most common response was that quality management would become integrated into either an integrated management system (30.6 per cent of respondents) or a system of continuous improvement (9.4 per cent). There was a tendency for more experienced quality managers to nominate integration into a management system. Approximately a third of respondents (33.6 per cent) predicted that it would continue as a discrete field, although some of these predicted some modifications such as expansion/extension (8.9 per cent). Only 5.5 per cent believed that it would become extinct, although an additional 6.8 per cent believed that it would decrease in importance or become marginalised. None of the respondents predicted that it would be outsourced. The remaining respondents predicted that it would be reborn or rebranded in some way (3.0 per cent) or were unsure or did not answer the question (11.1 per cent).

CONCLUSIONS

Australian quality managers seem to have a fairly optimistic view of the future of quality management—albeit not necessarily as a discrete field. Most did not see their training needs as different to that of other managers and most appeared satisfied with the usefulness of the training they had undertaken.

But some of the other findings cast a shadow over this optimistic picture. Many managers seemed to be either unaware of their own training needs or to hold a belief that they did not require any future training. Also of concern is the perceived lack of organisational support for training and development. While the quality managers themselves accorded a high importance to training, they cited lack of time as one of the main constraints, indicating that it probably often takes a back seat to other duties seen as more pressing. This helps to explain the finding that most of the training programs were of very short duration. Almost one in five had undertaken no training in the past five years, and while not reported above, few had provided training to others in their organisation. Provision of training was fragmented between numerous providers while responsibility for professional development was spread between numerous associations.

At a more fundamental level, the quality managers were roughly evenly divided as to whether quality management would continue as a specialist field or become integrated with other management systems. This uncertainty clearly creates an impediment to the greater systematisation of training and development provision.

In conclusion, Australian quality managers appear by and large to be getting the training and development they want, but this does not necessarily equate to the type of training and development they need to perform their complex roles effectively. We note that in few other professions is training and development left entirely to the vagaries of the market and the whims of practitioners. More typically there is some body to establish and enforce minimum standards in some systematic way.

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Table 1. Number of Training Courses Undertaken in Past Five Years (Multiple Response)

Type of Course	Frequency	Per Cent of sample
General management	81	34.5
Quality practices/principles	70	29.8
Internal auditing	60	25.5
Quality tools	54	23.0
Technical/software	45	19.1
Occupational health and safety	45	19.1
No response	43	18.3
Lead auditor	20	8.5
Train the trainer	17	7.2
Leadership/teams	17	7.2
Environmental auditing	17	7.2
Business process improvement/strategic	11	4.7
Interpersonal skills	9	4.7
Risk management	8	3.4
Customer service	7	3.0
Finance	5	2.1
Production	5	2.1
Change management	4	1.7
Innovation	2	0.9
Problem solving	2	0.9
WHSO	2	0.9
Human resource management	1	0.4
Sales	1	0.4

Note: Multiple responses (up to five) permitted