
Management development and management NVQs

Management
development and
NVQs

Stephen Swailes

School of Business, Nene College, Northampton, UK

405

Introduction

Occupational standards for first-line managers (Level 1) were published by the Management Charter Initiative (MCI)[1] about 1990 and subsequently incorporated in the National Vocational Qualifications (NVQ) Level 4 in Management. A sub-set of the Level 1 standards reflecting the supervisor's role (NVQ3) and Level 2 which describes the middle manager's role (NVQ5) were published subsequently. Standards for senior managers are now available. Higher education institutions (HEIs) were cautious in their uptake of management NVQs and this has occurred more in the new university sector than in the old. Nevertheless, competence-based management development in the form of vocational qualifications (VQs) has expanded into the portfolio of management courses and on to the training agenda of organizations.

The competence approach and VQs in general have attracted extensive criticism[2-4]. The methodology behind the standards (functional analysis) has been questioned[5-7]. Another theme of criticism concerns allegations of excessive bureaucracy, leading to difficulty implementing VQ programmes. Yet another concerns their educational validity, such as confusion about the meaning of competence, under-emphasis of knowledge and understanding, avoidance of meta-competences[8] and of unreliable assessment standards[9].

Most NVQs exist at Levels 1 and 2 and it is at these levels that most assessors gained their first experience of assessment. This low-level experience was extended to assessment of higher level VQs, that is Levels 4 and 5. The approach, sometimes called "box ticking", does not seem suitable for higher VQ levels, yet there was pressure on assessors to maintain assessment strategies across levels in accordance with standard assessment guidance criteria. With experience, opinion is building that Levels 4 and 5 need a more holistic, as opposed to reductionist, interpretation of the standards.

Vocational qualifications emphasize accreditation of competence and to reach accreditation some individuals undertake training and development. Others can obtain accreditation of prior experience and learning, and here, in particular, there is concern for the capacity of NVQs to develop as opposed to accredit, to look forward and not backward. The ability to develop knowledge and competence becomes a concern, particularly at the higher NVQ Levels 4 and 5, as individual self-development is a notion central to education and

An earlier version of this paper was delivered to the Critical Thinking and Future Direction Track, British Academy of Management Conference, Aston University, 16-18 September 1996.

Journal of Management
Development, Vol. 16 No. 6, 1997,
pp. 405-417. © MCB University
Press, 0262-1711

training. Indeed, the ability to learn is one of the characteristics of effective managers[10].

While criticisms of the structural aspects of NVQs have emerged from attempts to implement them across diverse vocations, criticism of their impact on individual learning and development has been largely subjective. As far as management is concerned, criticism has focused on the competence process and the MCI's particular interpretation of management as portrayed in the standards. The youthfulness of Management VQs and the relatively low number of completions so far, compared to academic qualifications, have inevitably held back research into the VQ process as experienced by candidates. Furthermore, criticism of VQs has sometimes overlooked the possibility that the same, or similar, limitations exist with conventional taught management programmes. For instance, concern about variable assessment standards touches many programmes in higher education, not just vocational qualifications.

There is little empirical work on the developmental effectiveness of MCI's management standards. For exceptions see [11-13]. The earliest studies may have incorporated essentially "box ticking" as opposed to developmental approaches and, if so, this could have had a big effect on the observed outcomes. Clearly there is a need for research on candidates in learning situations if the effectiveness of management VQs is ever to be better understood.

In an attempt to contribute to this debate this paper addresses three main questions. First, can management NVQs develop individuals? Second, do perceptions of individual development differ following vocational and academic programmes in management? Third, what, if any, mechanisms for development operate during the VQ process?

Method

Measuring management development

Seventeen dimensions for management development were identified using the MCI's personal competence model as a basis. A questionnaire was devised on which respondents were asked to rate the extent to which they felt they had developed using a five-point anchored scale from "to no extent" to "a large extent". Example dimensions from the questionnaire are: relations with customers; showing concern for improvement; and managing your own emotions. In addition, respondents were asked to rate how the programme had met their "overall objectives" and their "personal objectives".

Sixteen candidates who had completed the full NVQ agreed to short interviews to obtain their views on if and how the NVQ programme had developed them. Interviews took place within a few months of completing the award. While some of the interviewees may have also completed the questionnaire, there was a gap between the two events and it is highly unlikely that the response to one influenced the other. Interview data were coded into broad categories which were then reduced to finer categories simply by continual comparison of the dialogue.

Perceptions of the NVQ process

Perceptions of the NVQ process were also assessed through a questionnaire developed for this study and referred to here as the vocational qualification congruence questionnaire (VQCQ). Seven items were developed to assess the candidates' feelings towards VQs after they had completed the qualification. Example items are "Given the time and the need to study I would do another NVQ" and "I found having to complete a portfolio a frustrating thing to do". A five-point response scale from "strongly disagree" to "strongly agree" was used. The higher the mean score, the more favourable the respondent's feelings were towards NVQs.

The questionnaire sample

The population surveyed included managers or aspiring managers who had completed their qualification through a Midlands college of higher education. Candidates had completed their course up to two years before the survey. About 80 candidates who had completed a full NVQ Level 4 or 5 in Management were surveyed and 52 responses were received. Of these, 45 had completed NVQ Level 4. While this was less than desired for a survey of this type, it represents a good sample size, given the difficulty of identifying and contacting NVQ candidates on a larger scale. Indeed, the total number of completions of the full NVQ 4 or 5 in Management is still only several thousand. About 200 managers who had completed a Diploma in Management Studies (DMS) were also contacted and 104 replies were received.

Courses followed

The DMS taken by the sample group was comparable to others in higher education. The course lasted two years and involved around 300 hours of class contact plus residential study. Assessment was through examination and course work to rigid deadlines. The course is well established at the institution having incorporated student feedback over many years.

The NVQ programmes are more recent and were first delivered in 1992. They involved about 100 hours of tutor contact which focused mostly on delivering the knowledge and understanding specification in the NVQ, interpreting the standards and advice on building a portfolio. Assessment was solely through the production of a portfolio and did not conform to the rigid deadlines of the DMS. Typical completion times for NVQ4 were 12-15 months and 24-30 months for NVQ5. Candidates were discouraged from adopting a "box ticking" approach. In contrast, they were encouraged to locate "chunky" evidence spanning different competences, to write up teaching/learning activities as evidence and to reflect on managerial practice in their organization. This was achieved with partial success. There was no overlap in delivery between the programmes, that is the cohorts never mixed for teaching purposes. Many tutors were used on the two programmes over the survey period. Although a few tutors taught on both courses, overlap was small and is not likely to have influenced the findings.

Results

The sample

Of the NVQ respondents, 65 per cent were female compared to 38 per cent of DMS respondents. The two samples were very similar in terms of occupational sector as, in both samples, about 50 per cent were employed in the public sector, 30 per cent were employed in private sector services and 10 per cent employed in private sector production industries. Most of the remainder worked in the voluntary sector.

The DMS sample was slightly older and had more experience in a management position by the time they had completed the award. The average age of NVQ and DMS candidates on completion was 34.9 and 36.4 years respectively. The median amount of commercial experience for both NVQ and DMS candidates on completion was three to five years respectively. However, the average amount of managerial experience of DMS candidates is thought to have been about two years greater.

Self-perceptions of management development (questionnaire)

Most respondents perceived that some development had taken place as the mean scale score on each dimension was between 2.5-4.0 ranging from "to a small extent" to "a large extent". Means for the two groups are given in Table I. For DMS candidates, the five highest rated dimensions in descending order were: personal confidence, achieving overall objectives, managing change, concern for resources and concern for improvement. For NVQ candidates, the highest ratings were: personal confidence, achieving overall objectives, achieving personal objectives, team management and concern for improvement.

Comparisons of the two groups (NVQ and DMS) showed that, of the 19 dimensions listed, significantly different scores ($p < 0.05$) were obtained only for three dimensions: the development of numerical and written ability where the DMS candidates perceived greater development, and team management where NVQ candidates perceived greater development. No self-perception dimension differed significantly when the respondent's sex was the grouping variable.

While the means (and modes) from the two groups were similar, frequency distributions for item responses showed that the percentage of respondents recording 1 (no improvement) was higher for the NVQ group on 18 of the 19 variables. For example, 8 per cent of the NVQ group scored 1 for managing change compared to 1 per cent of the DMS group. Although not all variables were as distinct as this, there was a larger "tail" of non-developers in the NVQ group.

Principal components analysis was performed to explore any clustering of development dimensions. Two of the 19 variables were dropped before this analysis as they did not represent distinct dimensions for management development. These were achievement of overall objectives and achievement of personal objectives. The Kaiser-Meyer-Olkin measure was 0.90, thus supporting the use of factor analysis[14]. Varimax rotation of data from the NVQ group identified three factors. Table II shows the factor loadings for the NVQ group.

Personal competence dimension	Mean NVQ score	Mean DMS score	Management development and NVQs
Personal confidence	3.83	3.78	
Overall objectives	3.61	3.68	
Setting/achieving personal objectives	3.48	3.23	
Team management*	3.43	3.03	
Concern for improvement	3.36	3.42	
Introducing/managing change	3.36	3.47	
Decision-making abilities	3.23	3.35	
Concern for resource usage	3.15	3.45	
Sensitivity to others	3.13	2.93	
Relations with colleagues	3.14	2.90	
Understanding other people	3.12	2.99	
Relations with line manager	3.12	3.29	
Relations with subordinates	3.00	2.78	
Gaining commitment of others	2.88	2.90	
Literacy*	2.48	2.97	
Relations with customers	2.85	3.08	
Managing own emotions	2.83	2.86	
Commitment to the organization	2.64	2.68	
Numeracy*	2.48	2.97	

Notes:

*Significantly different, $p < 0.05$

Respondents were asked, "To what extent did the course help you improve the following?" Scale was 1 – not at all, 2 – to a small extent, 3 – to a moderate extent, 4 – to a significant extent, 5 – to a large extent

Table I.

Comparison of mean scores between NVQ and DMS candidates

Factor 1 loaded variables tapping into a general concern for improvement and the relationships needed to achieve this. These were: managing change, concern for improvement, resource utilization, decision-making abilities, relations with manager, team management, commitment to the organization, personal confidence and managing own emotions. Factor 2 loaded variables tapping the understanding of others, namely relations with colleagues and subordinates, sensitivity to others, understanding others and getting the commitment of others. Factor 3 loaded variables tapping into literacy and numeracy.

Table III shows the factor structure and loadings for the DMS group. The KMO measure was 0.84, again giving high confidence about the value of factor analysis. Varimax rotation identified four factors. Factor 1 loaded managing change, concern for improvement, relations with customers, personal confidence. Written and numerical ability also loaded on to this factor. Factor 2 loaded variables principally concerned with working relationships, namely team management, relations with manager, subordinates and colleagues. Factor 3 loaded variables concerned with understanding others, namely sensitivity to others, understanding other people, managing own emotions and getting the

	Factor 1	Factor 2	Factor 3
Introducing/managing change	0.72	0.43	
Decision making	0.68		0.40
Managing own emotions	0.53		0.44
Concern for improvement	0.77		
Written expression			0.83
Ability with figures			0.82
Organizational commitment	0.60		0.53
Getting commitment of others		0.71	
Personal confidence	0.58	0.42	
Relations with colleagues	0.48	0.61	0.42
Relations with customers	0.44	0.33	0.43
Relations with manager	0.69		0.42
Relations with subordinates		0.66	0.49
Concern for resource use	0.72		0.42
Sensitivity to others		0.80	
Team management	0.60	0.54	
Understanding others		0.82	
Eigenvalue	9.03	1.50	1.21
% cumulative variance	53.1	62.0	68.6

Table II.
Rotated factor matrix
of management
dimensions for the
NVQ group

Notes:
For clarity, only loadings above 0.40 are shown

	Factor 1	Factor 2	Factor 3	Factor 4
Introducing/managing change	0.54	0.41		
Decision making	0.39			0.72
Managing own emotions			0.55	0.54
Concern for improvement	0.87			
Written expression	0.58			
Ability with figures	0.58			
Organizational commitment				0.71
Getting commitment of others			0.52	0.45
Personal confidence	0.58	0.48		
Relations with colleagues		0.73		
Relations with customers	0.52			
Relations with manager		0.66		
Relations with subordinates		0.68		
Concern for resource use	0.65			
Sensitivity to others			0.85	
Team management		0.69		
Understanding others			0.78	
Eigenvalue	6.07	1.67	1.32	1.14
% cumulative variance	35.7	45.6	53.4	60.1

Table III.
Rotated factor matrix
of management
dimensions for the
DMS group

commitment of others. Factor 4 loaded variables concerned with decision making and personal commitment to the organization. Oblique rotation, as opposed to varimax orthogonal rotation, did not substantially change the factor structures.

Perceptions of the NVQ process

Following reliability analysis, two of the seven items in the VQCQ were dropped. Coefficient alpha for the remaining five items ($n = 50$) was 0.79, well above the conventional minimum of 0.7. A mean score was computed for the five items and correlated with the dimensions of management development.

Significant positive correlations ($p < 0.05$) were found with decision making (0.38), concern for improvement (0.29), concern for resource utilization (0.46), relations with manager (0.49), personal confidence (0.38), and commitment to the organization (0.29).

Interview findings

The first cluster to emerge from interview analysis concerned perceptions of enhanced self-awareness, involving greater awareness of the effects of one's management style, greater awareness of the attitudes and behaviour of others, greater personal confidence and a greater openness to feedback.

The second cluster concerned general managerial traits which tapped into feelings of improved understanding of the job, how others contribute to the organization and of the organization's business environment. Greater internal networking was also reported. The other general trait to surface concerned greater analysis of work and tasks and better task prioritization. These findings are illustrated in Figure 1.

Discussion

For candidates who had completed either the NVQ or the DMS the levels of perceived individual management development did not differ much between the two groups. Higher perceptions of numeracy development may be explained through inclusion in the DMS of a module on quantitative methods, a topic largely ignored in the NVQ programme. The assessment strategy of DMS being largely through essays and reports may explain the significantly higher ratings for development of written expression. It is not clear why team management was rated significantly more highly by the NVQ group. A possible explanation is that NVQ candidates may, overall, have held less responsibility for team management at the onset of the course and hence developed from a lower starting point on this dimension.

The factor structure obtained from NVQ candidates produced a "clean" solution as factor loadings formed distinct clusters. Factor 1 embraced improvement and relationships, factor 2 embraced the understanding of others and factor 3 written and numerical ability. Factors 1 and 2 are consistent with the clustering of interview data from NVQ candidates and lend support to the validity of interview findings. The factor structure obtained from DMS

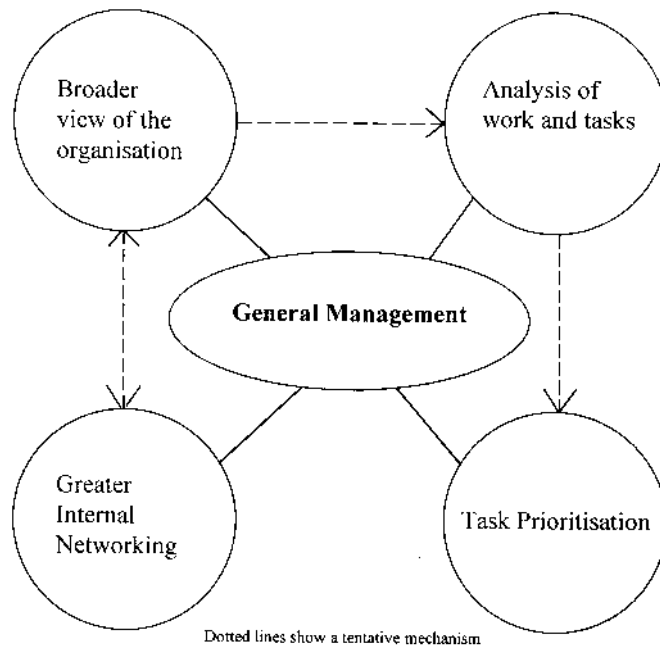
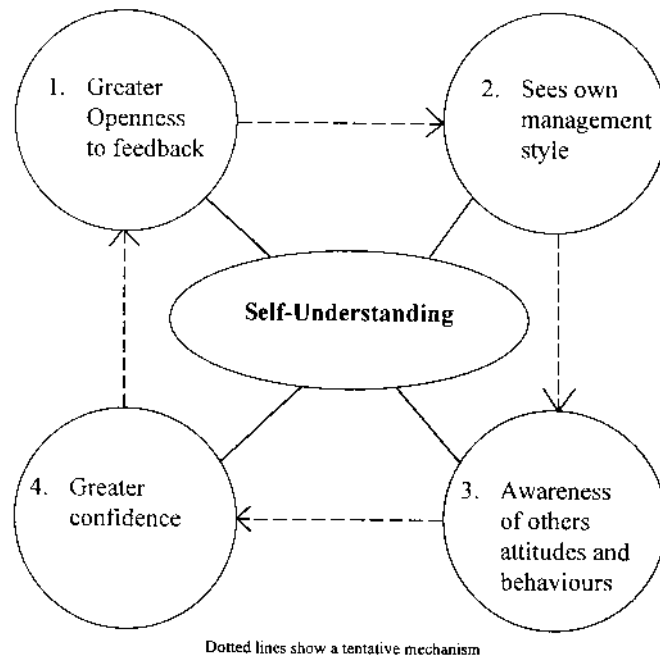


Figure 1.
Construction of
management
development
dimensions from
interview analysis

candidates was less distinct but there was some similarity with that obtained from NVQ candidates. Sensitivity to others, understanding others and getting the commitment of others loaded on to the same factor (factor 3). Concern for improvement, managing change and personal confidence loaded on to factor 1.

The interview findings are consistent with Earley[12] who found that candidates reported more reflection on workplace performance, greater self-esteem, better contributions to team building, better understanding of others and better insights into general management. Winterton and Winterton[15] also found that competence-based management training (not always involving NVQs) led to individual development.

The variables showing low to moderate correlations with the mean VQCQ score were decision making, concern for improvement, relations with manager, personal confidence and personal commitment to the organization (all on factor 1 of the NVQ matrix) and resource management (on factor 2). These variables tap into the general management cluster previously identified. This suggests that perceptions of improved managerial ability associate positively with perceptions of vocational qualifications, although the associations are not particularly strong. No significant correlations were found for variables tapping into the self-understanding cluster, suggesting that perceptions of greater self-awareness may be independent of the individual's feel-good rating of vocational qualifications.

Taken together, these results support the notion that management VQs can develop individuals. This is an important finding given the concerns noted in the introduction and runs counter to previous claims[2]. The NVQ process forces candidates to take feedback, initially at least, from assessors who are *occupationally* as well as academically qualified. Usually a candidate will need advice throughout the portfolio process. Candidates disposed towards openness, having learned to take and act on advice from a neutral adviser, could extend this openness such that they develop a higher propensity to take feedback from colleagues and subordinates and/or to be better interpreters of the talk and behaviours of others. This may develop the ability to be more conscious of personal management style and its effect on the attitudes and behaviour of others. If higher self-awareness results in improved performance or working relationships, then this could, in turn, lead to greater self-confidence in individual decisions. Thus a tentative pathway can be proposed in that greater openness to feedback leads to greater awareness of own management style. Adjustments to management style could yield better operating results which, in turn, lead to improved confidence about own abilities. This pathway is shown in Figure 1.

The longer "tail" of NVQ candidates who perceived no development poses a sobering qualifier to the above findings. In absolute terms, more NVQ candidates reported development "to no extent" on some dimensions than DMS candidates. This indicates that there were aspects of the NVQ programme which were less effective than the academic programme, yet it is not possible

from the survey to say whether this was an artefact of programme design, something rooted in the competence approach or a combination of these.

Completion rates on the NVQ programme were lower than on the DMS and this was particularly acute on NVQ5. Hence there was a general problem concerning the “compleatability” of NVQs and the factors influencing the completion rate might have influenced perceptions of development in those who finished. A possible explanation revolves around the approach to portfolio building adopted by candidates. While NVQ candidates were all encouraged to adopt a reflective approach to management in their organizations this was not adopted by all. Some of the NVQ candidates were assessors of other NVQs in their organizations, for example health care, or had achieved an NVQ previously, for example in Customer Service. Their recipe for constructing a portfolio was imported into the management programme and this was a real and potential source of conflict.

Assessors have to assess portfolios against the stated criteria and they should not reject evidence because it does not conform to some ideal of their own. Candidates tended to follow a path of least resistance which some perceived to be laid with mostly historical evidence plus evidence of knowledge and understanding. Assessment strategies on academic programmes typically use far fewer but much broader assessment criteria, giving more scope for candidates to confront current issues and concerns in their organization. Although NVQ candidates can be exhorted to take this approach in a portfolio, the extensive combination of performance criteria and range indicators in high level NVQs could be suppressing imagination and enquiry, leading to less analytical approaches overall.

A feature of the NVQ programme assessed in this survey is that all NVQ candidates received a substantial taught input. Cheetham’s survey of NVQ candidates[11] concluded that NVQs offer a framework for development but that, to be effective, they must “be brought to life with effort, imagination and professionalism”. The management standards appear to have much to offer management developers, so long as: candidate selection processes are sound, candidates’ perceptions of the NVQ process and experience are set at the right level, standards are interpreted flexibly to account for differing organizational contexts, and the evidencing process is challenging for the candidate, for example through tailored development plans.

In contrast to taught programmes it is possible to achieve an NVQ in Management through accreditation of prior learning (APL). Here, the candidate receives little, if any, knowledge inputs other than advice about constructing a portfolio using evidence for competence that he/she has already obtained, largely through normal work activities. The question remains about whether the APL route to the full NVQ has a developmental component or whether, as its name suggests, it simply accredits competence. While employers are wary of APL’s place in training[16], the APL route to a management NVQ is used by experienced managers and there are grounds for suspecting that some development could occur through it.

For instance, some candidates commented that the management standards act as a blueprint for certain managerial tasks, which had helped them standardize and improve organizational processes. In some cases, sequences in the standards had been incorporated into company documentation, for example recruitment and selection procedures. The standards also emphasized the importance of topics, for example budget headings. Yet the standards also received criticism. Service sector candidates in particular saw a mismatch between the evidence requirements forced by the standards and the nature of service sector work, particularly the public sector. This caused frustration and diminished the learning experience. Acute problems of this kind may have caused the longer “tail” noted above.

Limitations of the study

Ideally, this survey would have contrasted groups with greater equivalence, for example NVQ4 and Certificate in Management, NVQ5 and DMS. At the time, however, this was not possible. A further limitation is that interviews were not conducted with the DMS group to contrast the ways in which they constructed their perceptions of development. Questionnaire respondents had completed their award up to two years before the survey, but no attempt was made to examine the effect of time after completion on the responses.

More serious, perhaps, was the omission of candidates who began a programme, but who withdrew for course-related reasons. However, the aim of this survey was to assess the effectiveness of management NVQs as management development vehicles for people who complete a programme. The related but separate question of why more people withdraw or prolong completion is a topic for separate study.

Another potentially important limitation is that ratings of management development were obtained solely from the participants and were not obtained from independent sources, for example line managers. Holman and Hall[13] considered that “Development...is...largely the adoption of managerialist rhetoric rather than a fundamental change in practice itself” and used this to explain away benefits reported by candidates. However, one organization employing several of the NVQ candidates strongly believed that individuals had progressed substantially as a direct result of the programme[17]. This observation helps to dispel the possibility that respondents simply reiterated the vocabulary taught to them. The reiteration theory is also countered by the observation that some aspects of management covered on the course were hardly mentioned by interviewees, for example aspects of managing finance and information.

Conclusions

While the units and elements in the management standards focus on general management skills, this study provides evidence that NVQ Level 4 in Management in particular is capable of enhancing both general skills and personal competence. It is impossible here to identify precisely how this

occurred and the result might have been observed if the NVQ candidates had simply attended the programme without producing a portfolio. More detailed research is needed to carefully untangle the influences of the management standards, the adviser/assessor and the taught inputs/workshops. While previous studies have identified concerns about the wording, structure and content of occupational standards, the influence of management standards alone on development, despite these criticisms, is not well understood.

Research is also needed into the portfolio process to identify the causes of relatively high withdrawal rates and slower completion rates on vocational qualifications. It is important to separate problems caused by programme design, which can be quickly overcome, from problems caused by faults embedded in the portfolio process (for example design of the standards or conventional NVQ assessment methods).

There is also scope to associate perceptions of the NVQ process with individual psychological traits like learning style and the ability to take and act on feedback. A possible link to preferred learning style also intrigued Earley[12]. While it is encouraging to find supportive evidence for the developmental ability of management NVQs, they seem to be lower in "completability" than comparable academic programmes. This could put a brake on their adoption in management education, which would be unfortunate given these findings. A better understanding of the fit between individual preferences for learning methods and the vocational qualification experience is an important topic for future research.

The future agenda for management NVQs should discard concerns about the way standards were compiled and whether they include the "right" competences. The recent Beaumont report[18] makes clear recommendations about structure and language, which it is hoped will be adopted in the design of new occupational standards. The new agenda should be concerned with legitimizing interpretations of the standards and strategies for evidencing competence so that negative factors affecting "completability" are addressed. These factors should be seen as obstacles to overcome through better understanding rather than as impenetrable barriers to NVQs in management education.

References

1. Management Charter Initiative (MCI), "Personal competence model", in *Level I or Level II Management Standards*, MCI, London, 1992.
2. Currie, G. and Darby, R., "Competence based management development: rhetoric and reality", *Journal of European Industrial Training*, Vol. 19 No. 5, 1995, pp. 11-18.
3. Everard, B., "Whither NVQs now?", *Transition*, Vol. 93 No. 5, 1993, pp. 20-1.
4. Littlefield, D., "The trouble with NVQs", *Personnel Management*, Vol. 26 No. 7, July 1994, pp. 47-8.
5. Stewart, J. and Hamlin, B., "Competence based qualifications: the case against change", *Journal of European Industrial Training*, Vol. 16 No. 7, 1992, pp. 21-32.
6. Stewart, J. and Hamlin, B., "Competence based qualifications: the case for established methodologies", *Journal of European Industrial Training*, Vol. 16 No. 10, 1992, pp. 9-16.

-
7. Mansfield, B., "Competence based qualifications: a response", *Journal of European Industrial Training*, Vol. 17 No. 3, 1993, pp. 19-22.
 8. Brown, R.B., "Meta-competence: reframing the competence debate", *Personnel Review*, Vol. 22 No. 6, 1993, pp. 26-37.
 9. Littlefield, D., "Questioning the value of NVQs", *People Management*, Vol. 1 No. 3, February 1995, pp. 26-8.
 10. Pedlar, M., Burgoyne, J. and Boydell, T., *A Manager's Guide to Self-development*, McGraw-Hill, London, 1986.
 11. Cheetham, G., *The Developmental Effectiveness of the Management Standards and Associated NVQs: An Examination of the MCI Approach to Management Development*, Report No. 19, Learning Methods Branch, Department of Employment, Sheffield, 1994.
 12. Earley, P., "Developing competence in schools: a critique of standards based approaches to management development", *Educational Management and Administration*, Vol. 21 No. 4, 1993, pp. 233-44.
 13. Holman, D. and Hall, L., "Competence in management development: rites and wrongs", *British Journal of Management*, Vol. 7 No. 2, 1996, pp. 191-202.
 14. Norusis, M.J., *SPSS Professional Statistics 6.1*, SPSS Inc., Chicago, IL, 1994.
 15. Winterton, J. and Winterton, R., *The Business Benefits of Competence Based Management Development*, Research Series RS16, HMSO, London, 1996.
 16. Smith, A. and Preston, D., "APL: the relationship between rhetoric and reality", *Management Education and Development*, Vol. 24 No. 4, 1993, pp. 395-405.
 17. Swailes, S. and Draper, H., *Municipal and Management Development through Competence Based Training*, unpublished working paper, Nene College, Northampton, 1996.
 18. Beaumont, G., "Review of 100 NVQs and SVQs", Report to the Department of Education and Employment, 1995.