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ABSTRACT

This paper discusses the increasing interest in quality assurance in British education including its measurement and management through the introduction of a quality assurance system. The reasons and benefits of beginning a quality assurance system are discussed, and questions of what constitutes quality, whether it is quality in fact (specification adherence), or quality in perception (consumer viewpoint), are considered. Three quality assurance systems are examined: British Standards 5750 Quality Systems Total Quality Management; and a system of the Staff College's devising. Also examined are two issues surrounding the implementation of a quality assurance system, namely, the type of college culture that exists, and the resources which the college is prepared to commit to quality assurance. Finally, the report outlines the stages for introducing a quality assurance system in the college setting. Stage 1 discusses the appraisal and diagnosis process and provides a checklist to assist the college in assessing its existing quality culture. The second stage examines the measurement of managerial commitment, and stage 3 focuses on costing considerations and analysis. The last three stages cover establishing a plan of action; involving everyone in the quality process; and review and evaluation. Contains 11 references and a 20-item bibliography. (GLR)

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# Mendip Papers

## College quality assurance systems

E Sallis & P Hingley



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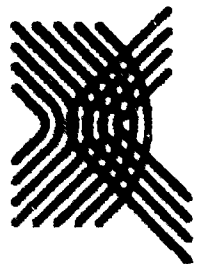
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**College quality  
assurance systems**

E Sallis & P Hingley



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# College quality assurance systems

E Sallis & P Hingley

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## Quality issues

### *The background*

Quality is one of the major issues for further education (FE) in the 1990s. There are many reasons for the recent upsurge of interest in quality issues. The most important arise out of the changes brought about by the 1988 Education Reform Act (ERA). The Act places considerable emphasis on monitoring colleges' outputs. The performance indicators specified in the report of The Joint Efficiency Study (*Managing colleges efficiently*, DES/WO 1987), and mirrored in the colleges' schemes of delegation, provide rudimentary measures of the efficiency of institutions. Performance indicators are generally crude, and, while useful for broad monitoring, do not address questions about the effectiveness of the learning process. They only provide proxies as to the successful management and operation of a college. Many colleges are looking for ways of going beyond performance indicators, and are developing systems for both demonstrating and improving the quality of their provision.

The new freedom granted to colleges by ERA is matched by requirements for greater accountability. Colleges need to show that they can consistently offer particular levels and quality of service. Training and Enterprise Councils (TECs) and the Scottish Local Enterprise Companies (LECs) are beginning to specify that colleges should install quality assurance systems as a means of demonstrating accountability. The recent White Paper (DES/DoE/WO, 1991) announced that the new FE Funding Council will expect colleges to have quality assurance (QA) systems in place.

Colleges also face greater competition both from within and from outside public sector further education. Competition can be an important spur to improve the quality of service. Focusing on the needs of the customer, which is at the heart of quality assurance, is the most effective means of facing competition.

The need to be accountable and the demands of competition have put a premium on the quality of the provision for the colleges' customers and clients. Colleges are now in the business of convincing external agencies and their customers that they are able to deliver consistently high standards. The change in the status of colleges in April 1993 will highlight this need. The closure of colleges which are not up to standard may be a part of this new reality.

This emphasis on the importance of quality is reflected in the published findings of the National Quality Survey (Sallis, 1990a) in which 66 per cent of the 260 colleges who responded said the development of a quality assurance system was a high priority for them.

The choice of quality systems and approaches is not easy to make, and has considerable implications for the management of the college. It is important for colleges to introduce systems which match their culture and resources. If this is achieved then the implementation is more likely to be 'right first time'. This is important if the concept of quality assurance is to have credibility with staff.

One interesting outcome of the National Quality Survey is the large number of requests the authors have received for advice and guidance on quality issues, particularly on issues concerned with the implementation of quality systems. This paper attempts to provide that advice. Quality assurance in further education is a large and multifaceted issue. It is also an area which is in its infancy. A number of the conclusions in this paper are necessarily tentative. They have been drawn from industrial quality models and from some of the limited experience which further education colleges have in this field.

### *The motivation for introducing a quality system*

It is important to be clear why a college would want to introduce a quality assurance system. The

motivation will vary between colleges. Some will want to satisfy the requirements of external agencies; others will be concerned to improve their marketing; whilst another group will give priority to the improvement of student services and the delivery of the curriculum. The reasons for introducing a quality system can be summed up as follows:

- the college itself wants to improve the quality of its service (the professional imperative);
- the college's customers deserve it (the moral imperative);
- other colleges have introduced one (the competitive imperative);
- the college has to — TECs and LECs are demanding it (the survival imperative).

An interesting finding in the survey was the nature of the motivation behind developing quality systems. The external pressures from local education authorities (LEAs) and TECs/LECs were less of an influence than the desire of colleges themselves to improve the quality of their provision. Most colleges have recognised the importance of offering a guaranteed level of service which meets the needs of their customers and clients.

As well as being clear about the original motivation behind the introduction of a quality assurance system, colleges also need to be certain of the benefits they expect from it. The National Survey suggests that there are a number of main benefits which colleges expect to flow from its introduction. These include:

- improved managerial performance;
- improved marketing opportunities;
- improvements to the college's administrative systems and procedures;
- improved service and clients' satisfaction;
- a change in the culture of the college;
- improvements to teaching and learning; and
- improved staff motivation and morale.

These benefits are not mutually exclusive, and all are legitimate. However, the approach taken to quality will depend to a great extent on the expected outcomes from implementing quality assurance. The attempt to create a total quality culture will require a different approach and philosophy than, say, an ambition to improve the college's administrative systems.

## *Definitions and perceptions of quality*

Quality can be both an absolute and a relative concept. As an absolute it is similar in nature to truth and beauty. It is an ideal with which there can be no compromise. This absolute definition implies that things which exhibit quality are of the highest standard. The standard is set by objective criteria. The absolute definition sees Rolls Royce cars as 'quality products', but not Ford Escorts. Rolls Royce cars have 'quality' because they are made to the highest specifications. Such high and absolute standards are usually based on aesthetics as well as practical criteria. 'Quality products' are not only precision engineered, but are things of beauty. Hand in hand with such 'quality' usually goes scarcity and a high price tag.

Quality assurance definitions of quality are different because they are relative in nature. Quality products need not be expensive or exclusive. They may be beautiful, but not necessarily so. They can be mundane, everyday, and throwaway—can openers, tins of soft drink and ballpoint pens. They achieve quality by being 'fit for purpose', in the British Standards Institution's (BSI) definition, and because they meet their specification in a consistent fashion. So long as a product consistently meets its maker's claims for it, and consumers are prepared to buy it, then a product has quality. In this definition both Ford Escorts and Rolls Royces are quality products. They both exhibit quality as long as they consistently conform to their manufacturers' specifications and standards.

In this relative definition a distinction has to be drawn between quality and standards. Quality is that which consistently conforms to a particular specification or standard, but it is not itself a standard. A standard is a pre-defined and measurable specification. It is perfectly possible for a product to be of high standard but poor quality. This is the case when there is a high level of specification but a lack of consistency in producing products to that specification. The obverse is also possible. If customers want a low level of specification at a low price, but one that can be consistently delivered, then that is also quality.

The total quality management definition of meeting customer requirements is a broader, but still a relative definition. The difference is that the arbitrator of quality is now the customer not the producer. This is an important distinction and one that requires further discussion. It reflects the difference between 'quality in fact' and 'quality in perception'.

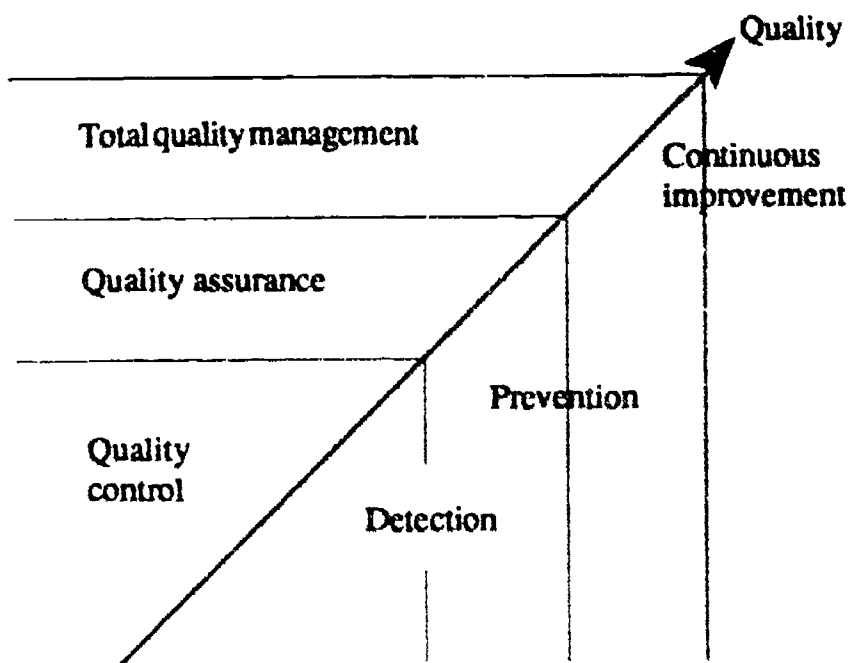
'Quality in fact' is based on the producer's or supplier's specification. It is about being able to meet consistently the standard which the producer has set for itself. 'Quality in fact' is the basis of the quality systems devised in accordance with the British Standards Institution's 5750 standard. The problem with 'quality in fact' is that consumers may have a different perception of the quality of the product from the producer. In the last analysis it is the consumer who is the arbitrator of quality, because without customers there is no business.

'Quality in perception', on the other hand, looks at quality from the consumer's viewpoint. It encompasses 'quality in fact' (consumers want products which meet specifications), but this by itself is not a sufficient definition of quality. Quality products have to appeal to consumers. Consumer satisfaction provides the evidence of quality.

The importance of this distinction for further education is that colleges need to be careful that they base their quality standards upon an analysis of customer wants and needs and not just upon their own definitions.

There is an argument that in a service industry like education the definition of quality should go beyond merely meeting customer requirements and should be about 'delighting customers'. It is, of course, difficult to measure 'delight'. However, the point of this definition is to emphasise the strong customer focus which a college needs to develop if it is to provide a total quality service.

**Figure 1: The flight path to quality**



## Quality assurance systems

### *The choice of a system*

There are essentially three systems of quality assurance for a college to choose between:

- BS 5750 Quality Systems (BSI 1987 and 1990);
- Total Quality Management (TQM);
- a system of the college's own devising.

Colleges are taking a variety of routes to assure quality. Some have embarked on the 'total quality' route. Others are devising their own systems. A third group are building systems to enable them to register with the British Standards Institution as an organisation with a registered Quality System — BS 5750.

In addition to the systems listed above, the Training, Enterprise and Education Directorate of the Department of Employment (formerly the Training Agency) has set up a new scheme which will be operated through the TECs/LECs. This is the 'Investors in People scheme'. It is a kite marked quality assurance system for the training and development of people in organisations. 'Investors

in People' provides a national scheme, with scope for local variation, for the effective investment in human resources. It could form part of a more comprehensive QA system or it can stand alone. Colleges may wish to consider this standard as part of their QA system.

### *The British Standard*

93 of the colleges who responded to the National Quality Survey said that they are following the BS 5750 route. Another 71 colleges answered that they are considering the possibility. The British Standards Institution has had interest from hundreds of colleges, and expects half a dozen colleges to be seeking BS 5750 registration in 1991, with perhaps another 40 doing so in 1992. Typically, in industry it takes 18 months to undertake the necessary work for BS 5750 registration, although as both BSI and further education are new to the standard it may initially take colleges longer.

The available choices of QA systems are not mutually incompatible. A number of colleges are combining or intending to combine a college-devised system for teaching and learning with BS 5750 for their short course units. 27 colleges in the Survey said that they are blending a TQM approach with BS 5750.



Certain aims may naturally lead a college to a particular solution in its choice of a quality system. For example, BS 5750 may appear ideal to a college which aims to improve its administrative systems or its managerial effectiveness. The emphasis on traceability, paper-based systems and procedures, and the system of external auditing fits well with a college which is seeking to improve accountability or managerial effectiveness. It also provides a potentially powerful marketing tool. The registration logo (of either BSI, Yardsley or Lloyds Register depending on who registration is obtained with) is claimed by many to provide a competitive edge. It could also place a college in a monopoly provider position if BS 5750 is insisted upon by the college's local TEC or LEC. Companies who are themselves BS 5750 registered may insist that all their suppliers, including training suppliers, are also registered. The fact that BS 5750 is identical with the European standard EN 29000 and the international quality standard ISO 9000 is an additional bonus for colleges pursuing international contracts.

BS 5750 places a considerable discipline on those intending to use it. Putting a system in place is not easy or straightforward. It involves a considerable investment of college resources and staff time. Everybody in the institution needs to understand its implications, to work the systems and follow the procedures which have been put in place.

BS 5750 only sets the standard for the system, not the standards which the college should be achieving. The college, together with its customers, is the arbitrator of standards. BS 5750 assures that there are systems in place to deliver those self-imposed standards. Some critics argue that because colleges set their own standards some could deliberately set low standards. However, this is not even a theoretical possibility because one of the elements in BS 5750 is contract review, and it is unlikely that customers and potential customers will demand anything but high standards from a college. What BS 5750 does not guarantee is consistency of standards between colleges.

It is important to note that BS 5750 is concerned with the consistency of the product rather than systematic quality improvement. It is argued that a college could obtain BS 5750 and cease to make further significant quality improvements, but would be able to maintain its BS 5750 registration. Again this is probably unlikely, because BS 5750 requires an organisation to have an effective system of review and evaluation, and to monitor its

performance. The outcomes of these processes will almost certainly lead to the establishment of an improvement culture.

The assurance of the system standards is carried out both by internal and third party auditing, and for the latter the college pays an audit fee. The external audit establishes the initial registration. If organisations cannot maintain their systems then registration is withdrawn. A number of accreditation bodies can undertake the audit. Accreditation bodies are registered with the Department of Trade and Industry (DTI) as being fit to undertake audits. Those bodies which could audit colleges are BSI Quality Assurance, Lloyds Register Quality Assurance, and Yardsley Quality Assurance. Organisations whose quality systems meet the BS 5750 specification achieve registered firm status with the DTI, and can use the accreditation bodies' quality systems logo for marketing and publicity purposes.

BS 5750 is new to education and training. The British Standards Institution has only recently issued guidance on applying the standard to colleges. The standard was originally written for manufacturing industry and needs considerable translation for the educational context. The applicability of BS 5750 has aroused strong feelings. There is a view that a rigidly applied BS 5750 system could be counter-productive in an organisation with a professional and well-educated workforce. The concern is whether the extra workload and the need to work strictly to systems and procedures, albeit internally generated, could damage staff morale and even the impetus for change within colleges. It is argued that it could undermine both creativity and the spirit of entrepreneurialism which are the sources of strength in FE colleges.

BS 5750 was originally designed for manufacturing industries who were designing, producing and testing physical products. One of its underlying concepts is that a quality system must be able to assure the production of products of consistent quality. This presents a methodological problem in education, where the 'products', however defined, cannot be produced to a measurably consistent standard regardless of the efficacy of the quality system.

Originally, BSI insisted that the student (or the value added to the student) was the product of the process. However, under pressure from those who argued that the student is not the product but the customer, it has subsequently agreed that the

programme of courses and/or the learning process also qualify as products. But whichever product definition is adopted, it is still not possible consistently to produce an educational 'product' in the way that a physical product can be produced. The problem is that in education, in common with other service industries, the interaction between the customer and the supplier alters the quality of service being provided. Customers have an important role in determining the quality of the service they receive.

In education, the customer has a direct role in the production of the quality of the educational product. All teachers know that no two classes are identical, because of the individuals who comprise the class and the nature of the interactions in the classroom. It is simply not possible to deliver a consistent and consistently uniform learning experience. The motivation and attitudes of learners are an important aspect of the quality of the education they receive.

A college quality system needs to confront this difficult problem. Quality policies and implementation strategies need to recognise the effect which student/staff interactions have on the consistency of service delivery. For this reason many people have argued that colleges might do better to leave BS 5750 alone and wait for the publication of a service industry standard. A service standard is in preparation by the International Organisation for Standardisation (ISO) as ISO 9004/2. It may offer a more sympathetic approach to the problem of service quality consistency. Time scales are clearly important, but the issue of the product or the outcomes from the learning process will need to be clearly addressed in a college's quality policy statement, if it is following the British Standard accreditation route. A practical way of addressing this problem is not to focus directly on the learning process but on the things which surround and support it. Such an approach would be to specify the level of entitlement which a student might expect from the college. The college will then build systems which provide a reasonably consistent level of entitlement. If the entitlements are closely defined they will have an important direct influence on the learning process, without the need to look for consistency in the student/teacher interactions which take place during that process.

BS 5750 has its supporters in education, and a number of colleges are working hard on its implementation. Supporters of the BSI approach

contend that well-devised systems, created by the staff that work them, enhance professionalism and are entirely consistent with the educational aims of their colleges. They argue that BS 5750 saves time in the long run and makes the institution more efficient. At this stage in its development it is too early to evaluate BS 5750's impact on and relevance to further education. However, this caveat applies equally to all quality system models.

### *TQM — a journey not a destination*

For colleges who see quality as an all-embracing holistic concept, with a strong customer focus, then the idea of total quality management may have a greater appeal than BS 5750. However, BS 5750 should not be written off by colleges looking to take a total quality approach. The two are not incompatible. Quality expert John Oakland (1989) argues that BS 5750 can be a useful lead into TQM. Another approach is to see the efficacy of systems and procedures as one element of total quality and to use BS 5750 for that aspect of the quality system. A college can make as much of BS 5750 as it wants.

TQM can be introduced without using the British Standard. Like BS 5750 there is as yet no clear definition as to exactly what TQM means in an educational setting. However, many of the concepts applied to TQM in an industrial setting may equally apply to education. 83 of the colleges who responded to the National Quality Survey questionnaire said that they were taking the TQM route.

The fundamentals of TQM are that:

- leadership and commitment to quality must come from the top;
- the commitment to quality must be organisation wide;
- a total quality culture needs to be created;
- the definition of quality is meeting customer requirements;
- the standard is 'right first time';
- prevention not detection assures quality;
- the organisation's focus is the customer;
- customers are both internal and external;
- quality systems must be vehicles for the empowerment of staff, not for controlling them;

- all employees need considerable training in quality issues;
- all staff are responsible for quality within their operational sphere;
- teamwork is an essential ingredient of the process of assuring quality;
- quality improvements should be rewarded (incentives, bonuses etc.);
- quality improvements must be measurable and measured;
- customer needs and wants must be solicited.

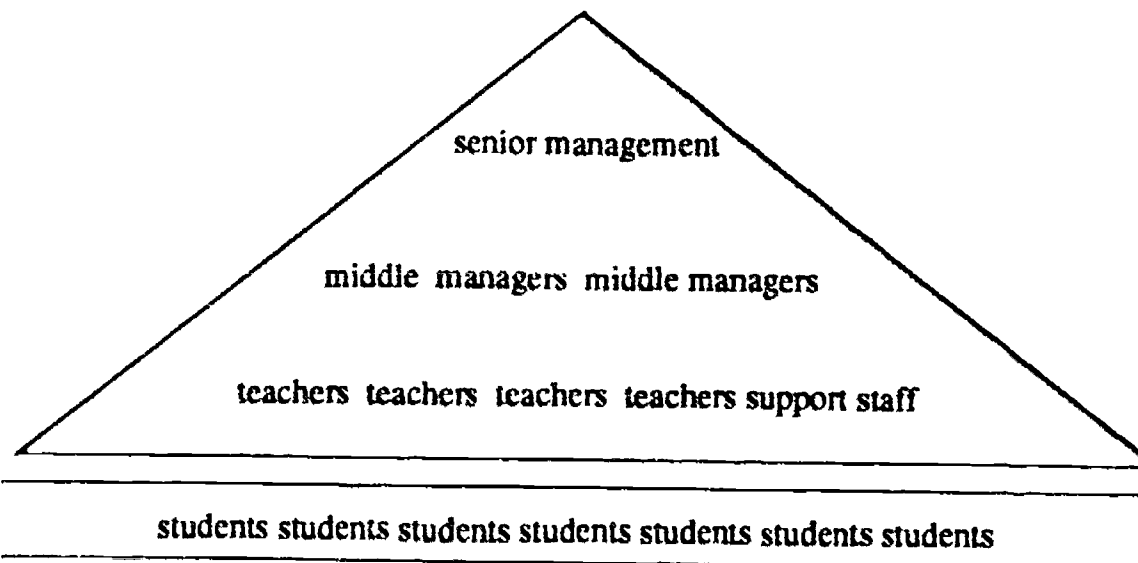
There is a need to translate a number of these concepts into an educational setting. Perhaps the most pivotal is the concept of the customer-supplier chain. This simple idea is the basis of the culture of TQM. It revolves around the idea that everybody is the supplier and the customer of everyone else. Customers are internal as well as external to it. They can be located lower down as well as higher up the hierarchy. Every individual in the organisation has to perform their task to the best of their ability whilst conforming to their customer standards. Customers have the right to complain about the level of service they receive. A secretary can expect to read the boss' handwriting, and the boss can

expect error free typing. The job of checking the typing is the secretary's. The secretary's boss is responsible for explaining the standard and providing the necessary training to ensure zero defects. Students have a right to be able to read the teacher's work on the chalkboard or from the overhead projector and to have their work marked on time. Teachers have an expectation that students are motivated to learn, do the work they are set and hand it in on time.

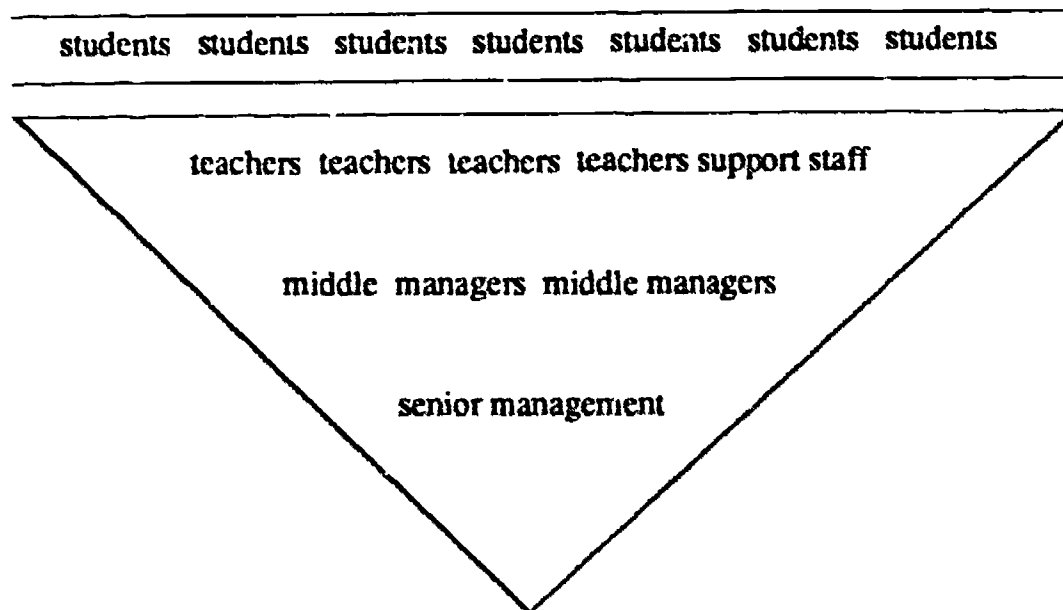
The customer-supplier chain, like any other, is only as strong as its weakest link. It has to be maintained by a management committed to making it work and to investing in people and their training.

Once the concept of the customer-supplier chain has been grasped, it has enormous implications for the culture of the organisation and the relationships within it. The first casualty is the traditional notion of organisational status. The role of senior and middle management in a TQM culture is to support and empower the teaching staff and students, not to control them. This can most graphically be illustrated by a comparison of the traditional hierarchical organisational chart with its TQM counterpart (see Figures 2 and 3).

Figure 2: The traditional organisational chart



**Figure 3: The TQM organisational focus (the upside down organisation)**



The upside down organisational focus does not affect the structure of authority in the college. Nor does it diminish the essential leadership role of senior management. It aims instead to emphasise that colleges must be customer-driven organisations. Coupled with this is the key role of teaching and support staff, who directly interact with and provide students with learning and support services.

An important aspect of the role of management in a TQM culture is the support and empowerment of front-line staff. Management must also ensure that the systems and procedures of the organisation work effectively, and that staff are trained in their operation and implications. Typically, managers in non-TQM organisations spend 30 per cent of their time in dealing with systems failure, complaints and with 'firefighting'. As TQM saves that time, managers have more time to plan ahead and develop new ideas.

Teamwork has to be interwoven into the notion of customer-supplier chains. It is not just course teams which need to be considered here, but teamwork across the institution. This is not just because course teams may be an outdated term in an age where the curriculum is being increasingly modularised and the idea of a course is increasingly difficult to define. It is rather because TQM requires everyone in an organisation to be a team member.

TQM is underpinned by a notion that everyone is responsible for quality. It follows that teamwork must permeate the whole institution. Teams must be in place and be nurtured at all levels in the organisation — support staff, middle and senior managers, and teaching staff. Teamwork must cut across some of the caste boundaries in a college. Teams consisting of academic and support staff meeting regularly to discuss areas of concern to students have not been usual features of college life. Teams can only exist if they are supported, nurtured and valued, and resourced. If staff are to meet regularly, time has to be found for key groups to meet. Proper training in team leading and team building is also an important element in this process.

The other concept linked to the customer-supplier chain which needs translation, is the quality standard of TQM — 'right first time every time'. This is an easily understandable notion in a manufacturing environment. It sets the standard of producing 100 per cent of output to the required specification. Even in a manufacturing environment this notion has its difficulties, because in a total quality culture 'right first time' applies equally to after-sales service, enquiries and reception, and internal and external customers.

In a college, the translation will depend in part on the definition of the product of a college. If students

are chosen as the product, the obvious translation is that all students will achieve their agreed aims from their college programme. This has a range of implications, including the completion of an action plan for each student, having a system for monitoring progress, and taking corrective action if goals are not being met. It also involves having a system in place to ensure that individuals' action plans will be implemented. This process is familiar to every teacher. The difference here is the need to systematically measure and record progress, to monitor formally and to take corrective action. Measurement and monitoring are essential aspects in total quality and a range of specialist quantitative methods, known as Statistical Process Control (SPC), has grown up to provide the essential monitoring techniques. In education these will need to be developed and defined.

Where the student is the product, 'right first time' should mean that each and every student will make a success of their programme. This notion will cause enormous difficulties for colleges preparing students for external norm-referenced examinations. Whether 100 per cent examination passes are aspirational targets or realistic goals will have to be a question for debate in the college.

If the course or programme is the product, rather than the student, then 'right first time' has other implications. 100 per cent pass rates will not be the standard. Instead programmes will need to conform to very precise course specifications. It could prove useful to employ the idea of student entitlements, and to draw up specifications and procedures to ensure that these are delivered.

TQM is a long-term process. Typically, TQM programmes take five to seven years to implement. Unlike BS 5750 there is no objective external standard nor any third party assessment. The main difference is that BS 5750 is about systems, whereas TQM is broader in its application and is essentially a management philosophy. The aim of TQM is to establish a continuous improvement culture. TQM is not a standard to be reached. Rather it is a means of building quality into the culture of the organisation.

TQM is a journey not a destination. In order to undertake that journey, colleges will need to declare themselves 'total quality institutions'. This will take a considerable act of will, because it will commit the college to a process which takes time,

resources and considerable effort. It will put the college under the microscope and open it to scrutiny. Many colleges will find it difficult to live up to the challenges they have set themselves, and will be prey to sceptics and cynics. Nevertheless, TQM involves making a declaration that this is the direction a college wishes to follow.

Very few further education colleges have taken the TQM route, and (like BS 5750) it is a largely untried methodology. What adherents of both BS 5750 and TQM have in common is the view that models derived from industrial, and largely manufacturing, environments are translatable into an educational setting. They deny the view that education is a unique activity. However, both methodologies require translation and modification. Despite the recent interest in quality assurance from colleges, a great deal of fundamental work is still required on the translation of quality assurance methodologies into terms which will have an impact on the student experience.

The usual approach to TQM implementation is through a long series of small, continuous improvement projects based upon existing best practice in the organisation. The projects start with an analysis of current problems and finding solutions to them. In this way initial projects make their greatest impact.

TQM is wide open to failure. The long time period, the expense, and the lack of external assessment make it very vulnerable to a regression into past (and probably more comfortable) modes of operation. Education is a creature of fashion and many people have become cynical about the plethora of initiatives in recent years. TQM, if it is to succeed, must not be seen as just another initiative. It needs to be assimilated into the fabric of the college if it is to have a lasting impact. It is generally recognised that the main cause of failure is when senior management do not give TQM their full commitment. Above all, TQM is a top-down, management-led development. If senior management are not committed, TQM cannot succeed. Commitment in this context is not the same as support. Senior managers must set the example and provide the necessary leadership. Properly implemented and supported TQM needs to become a permanent part of the organisational culture. Total quality then becomes the organisation's culture.

## College-devised quality systems

Both TQM and BS 5750 may be too complex for colleges who want to use quality assurance as a means of improving aspects of the delivery of the curriculum. Both TQM and BS 5750 are expensive. From the National Quality Survey it was clear that many colleges saw neither approach as applicable to education.

For some colleges, improving the effectiveness of the course team by devising their own systems of professional evaluation may appear a more desirable alternative. Of course, many institutions argue that work on quality is nothing new. It is something that has been going on in colleges for years. The difference is the emphasis now being placed on systematic approaches to quality improvement and the need to demonstrate the existence of quality systems.

Colleges who decide to devise their own quality assurance systems have plenty of resources to draw on. The Training Enterprise and Education Directorate of the Department of Employment (TEED) has funded a number of projects in this area in recent years. The evaluation projects of Avon, Bedford and Birmingham are those that have received national prominence, although many LEAs have also devised their own schemes. Most of these have similar features including enhancing the role of the course team to make it the evaluator of quality, and using customer satisfaction questionnaires as the main method of monitoring the success of programmes. For many colleges these projects or college-devised derivatives offer a practical and affordable solution to tackling quality. They have the benefit over TQM and BS 5750 of being devised by educationalists, for education. The processes and thinking behind the projects are in many cases extremely sophisticated. They can, of course, provide the lead into BS 5750 and TQM. Many of the ideas contained in these quality projects fit well into a TQM framework, although by themselves they generally fall short of being total quality projects.

One of the most interesting attempts at an approach which fits well with the total quality mode is that of Miller, Inniss and Dower, devised for the then Training Agency. They argue that, because of the particular and complex nature of the educational process, no exact analogy from contexts outside further education can be exactly appropriate. Education requires its own quality service model. Their 'Strategic Quality Model' takes as its starting point the essential interaction between learners and the college. From this standpoint they argue that the learner's experience

needs to be explored from within. Miller *et al* start from student entitlements — 'what can the learner expect from us and our institution?' The learner's experience is highlighted at four critical stages of their college experience — pre-entry, entry, during the course, and the exit from the course. For each stage a set of quality characteristics is identified, together with the realistic standards which the college intends to deliver within its current level of resources. A quality measure is assigned to each standard so that the effectiveness of the delivery of each characteristic can be evaluated. The other interesting aspect of this model is that a different approach to quality is provided for each of three management levels within the college. The course team is identified as quality controllers, middle management as quality assurers, and the senior managers have the role of taking the strategic overview.

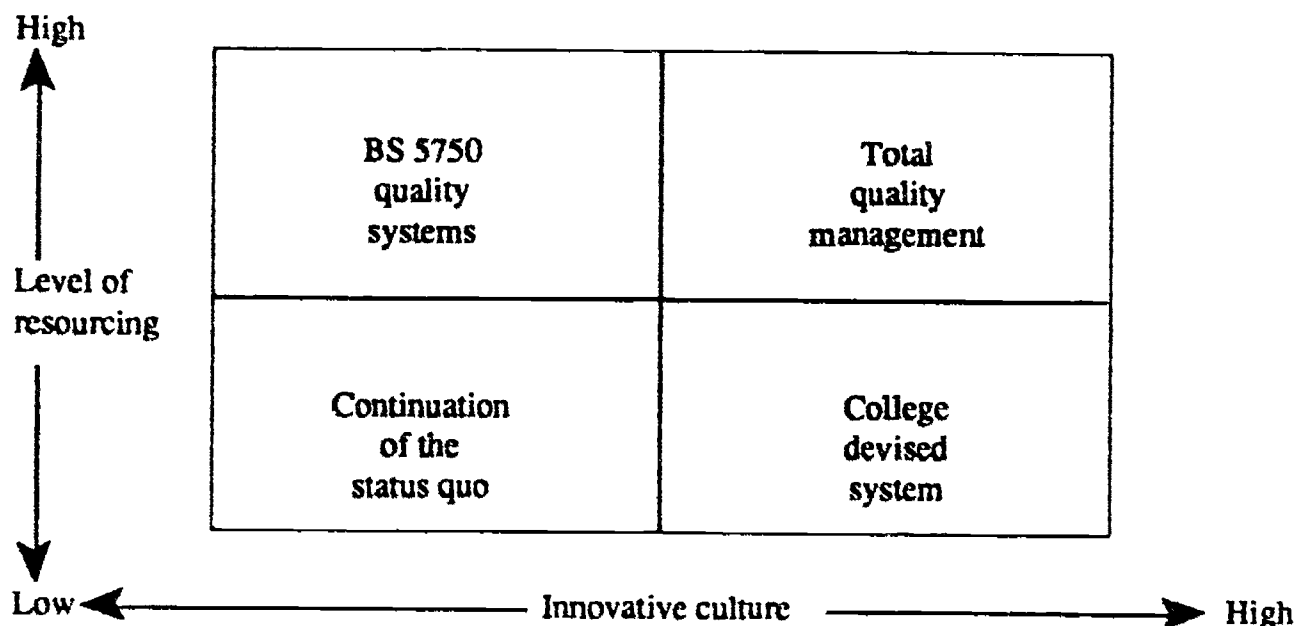
What the Miller *et al* model lacks, in common with other educationally devised systems, is any method of third party accreditation, although they share this characteristic with TQM models. This will not matter if the college's clients are prepared to accept them. Their advantage is that they are based on educational experience and do not face the problems of transposing industrial models to an FE setting.

## Some issues in implementing quality assurance

Once a college is clear about why it is pursuing quality assurance, it needs to consider whether it can cope with the demands of its chosen system. The choice of a system is not entirely a matter of fancy. There is a difference between wanting to introduce a quality assurance system and being able to do so. Quality assurance is an expensive and time consuming affair, with many pitfalls for the unwary. The costs are upfront and heavy in the short-term, while the benefits, which are potentially considerable, are mainly long-term. Colleges need to consider what they want to achieve, but also what they are able to do, and what they can afford. The key variables here are the nature of the existing college culture, and the resources which the college is prepared to commit to quality assurance.

The existing culture and the levels of resourcing for quality will, to a large extent, determine the nature of the system which can be implemented. The innovation/resourcing matrix represents an attempt to simplify the choices available to colleges (see Figure 4).

**Figure 4: Innovation/resourcing matrix**



As with all diagrammatic representations the matrix has its limitations, but it does bring into focus the realities of implementing quality assurance. It is based upon the hypothesis that, firstly, quality improvement needs to be adequately resourced. This may be taken as axiomatic, but nevertheless, before quality assurance can succeed, there are up-front costs which have to be borne. The main reason given in the National Quality Survey by colleges for not introducing quality assurance was the lack of available resources for this activity. Without spending money on quality not much can be achieved. The resources necessary will vary from college to college, but typically monies will need to be committed to undertaking a quality project, enhancing the physical environment, providing new and improved services, employing/seconding project co-ordinators, and staff development and training both for academic and support staff.

The second hypothesis underlying the matrix concerns the nature of the college's culture and its ability to innovate. A college with an innovative culture will find it easier to embrace quality assurance than one where innovation and change is seen as a threat or a chore. The culture of the college can inhibit or assist a college in its drive for quality.

The matrix demonstrates some of the choices available to colleges. Importantly, it demonstrates that resources by themselves are a necessary but not a sufficient condition to move towards a TQM approach, even if the college thought this to be desirable. The point of the matrix is to show that the TQM solution requires the prior existence of a quality-orientated culture and a high level of resource input because the level of innovation required for the introduction of TQM is greater than for BS 5750. However, BS 5750 can be used as a milestone on the road to TQM, or as the goal to be reached in introducing a total quality system.

The existing level of innovation in a college in relation to quality can be analysed by reference to the following table (Table 1). A college with an innovative quality culture is one where many of the building blocks for quality are already in place. The importance of a strong supportive culture to quality improvement cannot be overemphasised.

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**Table 1: An innovative culture?**

**Innovation**

Change is the norm.  
Change is a continuous process  
which is welcomed.

Clear mission and values.

Collegiate organisation.  
Organic structure.

Cross-boundary connections.  
Lateral as well as vertical communications

Open and free flow of information.

Pride in the organisation.

High levels of energy.

Conflict accepted, internalised and used to  
to stimulate debate.

Numerous rewards for quality.

Leadership seen as the managers' role.

**Less Innovation**

Change is resisted.  
Change is seen as a 'one-off'.  
The aim is stability.

Fragmented or idiosyncratic values.

Bureaucratic, hierarchical or  
compartmentalised organisation.

Vertical communications.  
One-way and top down communications

Constrained and directed information  
flows.

Uncertainty about what the  
organisation stands for.

Low levels of energy.

Conflict avoided or suppressed.

Rewards absent or scarce.

Administration seen as the managers'  
function.

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In an innovative quality culture, staff see the improvement of the quality of the service as their responsibility, and are willing to take part in the quality development programme. It might also, typically, be one where the institution had undertaken corporate and strategic planning and is clear about its mission and value system.

Strategic planning has a key role in an innovative culture because by undertaking it the college will have identified existing and potential institutional blockages. Additionally, if strategic planning has been carried out in an open and participative fashion it will have facilitated attitudinal acceptance of many of the ideas required for the implementation of a quality programme.

A well developed quality culture exhibits a number of other features, including a well organised course approval and validation mechanism, and it will have addressed the issue of monitoring and curriculum evaluation. Teamwork will be an important organisational attribute. It will have the commitment of senior management, and leadership from the top. Above all, there must be an enthusiasm within the organisation for quality improvement. As quality is not a destination but a process the move to a quality culture may demand a fundamental change of basic philosophy in the college.



# Introducing quality assurance

## Stage 1: appraisal and diagnosis

Colleges have different levels of sophistication when it comes to introducing quality assurance, and it is important to be clear just what these are. Using an instrument such as the quality checklist below will tell the college how far it is down the quality assurance road. The checklist has been devised to assist a college in assessing its existing quality culture. A college with an existing quality improvement culture will have moved significantly in the direction of addressing most or all of these issues.

### The quality checklist

Why? The driving force	pressure/driving force for QA appreciated, vision/mission established, need for QA recognised, benefits of QA calculated.
Who? Leadership	management committed, management style determined, quality co-ordinator(s) appointed.
When? The opportunity	timescales specified, strategy prepared.
From what base? The background	customer/student entitlements appraised, the need to change accepted, research into QA conducted, cross-college initiatives initiated.
How? The process	choice of systems/approaches decided, quality plan produced, staff commitment secured, teamwork encouraged, quality philosophy communicated, training needs identified, improvement projects planned, standards agreed, benchmarks established, quality tools designated,

procedures and systems catalogued,  
quality costs measured,  
validation mechanisms introduced,  
resources assigned,  
staff recognition accorded,  
quality rewarded,  
monitoring procedures selected,  
evaluation mechanisms defined,  
customer satisfaction assessed,  
feedback and methods of corrective action organised.

The implication from the checklist is that if a college has a relatively unsophisticated culture in quality terms then the initial management strategy should be to introduce systems and procedures in the areas where the college is weakest.

## Stage 2: the commitment of management

Senior managers have to understand and be committed to the principles of quality assurance if it is to be effective. QA requires a change in both management style and practice. Senior management must take the lead in this change if the rest of the organisation is to follow. Management training is a key element in this change.

The three key elements to the successful implementation of quality assurance are:

- a commitment from senior management for the quality assurance programme to succeed;
- an organisational culture in which innovation and change is an accepted fact of life; and
- a sufficient level of resource investment in the implementation of the quality programme.

## Stage 3: costing quality

During the diagnosis process some indication of the costs of quality need to be identified. This is not an easy exercise in a college, but it should be possible to provide some rough pointers. A college needs to know how it is doing, not how it thinks it is doing. The 'cost of quality' exercise is important because it concentrates on the things that are going wrong and which have to be put right.

The cost of quality (or more correctly, the cost of quality failure) can be established from a range of performance indicators such as wastage rates, failure rates, progression rates, and an analysis of customer and client satisfaction. Some analysis, through case studies, of the time spent by teachers and managers putting right things that have gone wrong, dealing with complaints, checking other peoples' work and finding out the correct procedures for carrying out routine tasks, will yield useful data on the costs of quality. It is important to look at these indicators from a negative viewpoint. Too often a 90 per cent pass rate is the cause for congratulation. Concentrating on the 10 per cent who failed poses a range of difficult questions about why this happened and whether the systems and procedures worked as well as they might, and whether a new approach could prevent such a level of failure in the future. What this process is not about is blame. While performance data, for this exercise, should be analysed from a negative standpoint, a wholly positive approach should be taken to finding creative solutions to improving matters.

From an analysis of the costs of quality, it should be possible to identify areas where improvements are most required. The importance of the cost of quality exercise is the focus on evidence of quality failure rather than on conjecture.

#### *Stage 4: planning for quality*

Quality will not happen merely by an attitude shift. It requires a plan of action to make it happen. This again is a key role of management in the process. The plan needs to be preceded by a commitment to quality in the organisation's mission statement and in the accompanying statement of aims and objectives. Once the direction is defined in the overall plan, it needs to be translated so that departmental managers can involve their own staff in the process. It is important at this stage that all managers in the organisation own the quality improvement process.

To ensure that there is organisation-wide commitment to quality improvement, a number of questions need to be asked and answered, including:

- Are we currently doing the right things?
- If we are doing the right things, are we doing them right?

- What are the key areas for making quality improvements?
- Are our plans adequate for making the quality improvements?
- Are our training plans adequate to make the quality improvements we have planned?
- Have we the means to take corrective action when things go wrong?

#### *Stage 5: everybody is involved in quality*

The issue of training is a key to involving everyone in the quality process. Linked with management support, it is the most important means of delivering quality.

The aim of this stage of the programme is for everyone in the organisation to recognise their role in quality. They must see themselves as the managers of their part of the process if they are to have ownership of the programme.

#### *Stage 6: review, evaluation, and the way forward*

Review and evaluation are critical phases in a quality programme. It is important to have feedback on the success of the quality programme. All employees should be involved. Internal auditing is a key feature of this process. Customer perceptions need to be sampled and appraised as internal evaluation is not by itself sufficient to gauge the level of success.

Once it is recognised that quality goals are being met, new ones need to be formulated. Quality standards need to be revised upwards. To make this happen the commitment of senior management must not waiver. Action plans as the way forward take on a particular significance.

### **Conclusions**

In conclusion it needs to be stressed that quality assurance is about good management practice. It is a systematic approach to doing the right things, in the right way, and getting them right. It is about making certain there are systems in place so that the organisation continues to deliver the right things every time to meet the customers' requirements.

Quality assurance is the process of achieving client satisfaction and continually improving the effectiveness of colleges. It can only be achieved and sustained by well motivated and skilled staff who carry out their work not just to employers and customer specifications, but also to their own high professional standards.

## References

British Standards Institution (Parts 1—3 1987, Part 4 1990) **BS 5750/ISO 9000 Quality systems.** BSI

British Standards Institution (1990) **Guidance notes for the application of BS 5750 part 2/ISO 9002/EN 29002 to education and training. Sixth draft.** BSI

Department of Education and Science/Welsh Office (1987) **Managing colleges efficiently. Report of a study of efficiency in non-advanced further education for the government institutions and the local authority associations.** HMSO

Department of Education and Science/Department of Employment/Welsh Office (1991) **Education**

**and training for the 21st century. Cm 1536 Volume I. Cm 1536 Volume II.** HMSO

Department of Trade and Industry (1990) **Total quality management.** DTI

Miller, J and Dower, A (1989) **Improving quality in further education: a guide for teachers in course teams.** Consultants at Work

Miller, J and Inniss, S (1990) **Managing quality improvement in further education: a guide for middle managers.** Consultants at Work

Miller, J and Inniss, S (1990) **Strategic quality management - a working paper.** Consultants at Work/Training Agency

Oakland, J S (1989) **Total quality management.** Butterworth/Heinemann

Sallis, E (1990a) **The National Quality Survey.** Mendip Paper MP009 Blagdon, The Staff College

Sallis, E (1990b) **Corporate planning in an FE college. Educational management and administration Vol 18 No 2 pp 30-34**

## Appendix 1: bibliography

### *Books — general*

**Atkinson, Philip E (1990) Creating culture change: the key to successful total quality management.** IFS Publications

Philip Atkinson tackles the key element of introducing TQM in this book — how to create the right culture for total quality. His book provides a good introduction to the philosophy and practice of total quality from the viewpoint of an experienced consultant. In his first chapter he points out that in the best Japanese companies TQM is not a bolt-on or something special: 'To them TQM is no more than business as usual!' That is clearly the challenge to anyone introducing total quality.

**Crosby, Philip B (1979) Quality is free.** Mentor Books

One of the key ideas is Crosby's quality maturity index. He details the stages an organisation must go through if it is to pursue the path to quality. These stages he identifies as uncertainty, awakening, enlightenment, wisdom and certainty. Crosby's is an inspiring, easy read. It is full of anecdotes and case studies. For Crosby, quality is free because a quality company is also efficient and effective. Quality improvements pay for themselves.

**Department of Trade and Industry (1990) Total quality management.** DTI.

This useful introductory guide is written by Professor John Oakland of Bradford University. It covers the main concepts of TQM.

**Oakland, John S (1989) Total quality management.** Butterworth/Heinemann

John Oakland is considered to be the British quality 'guru'. His book explains the basic concepts of TQM, and the practical steps necessary to implement it. These include

laying down a quality policy, organisational requirements, the role of the quality manager, TQM tools, statistical process control, and quality circles and quality teams. It includes a discussion of the relationship between TQM and ISO9000/BS5750. Oakland sees international and national quality standards as a useful and complementary first step on the path to TQM. The book provides guidance on how to ensure the survival of TQM.

**PA Consulting Group (1985/86) How to take part in the quality revolution: a management guide.**

A helpful introductory and practical guide to TQM written from the standpoint of commercial organisations. Available from the PA Consulting Group, Quality Management, Bowater House East, 68 Knightsbridge, London SW1X 7LJ.

**Peters, Tom (1987) Thriving on chaos.** Pan

Subtitled 'Prescriptions for a world turned upside down' (paperback version), Peters' book calls for nothing less than a managerial revolution for companies to remain globally competitive. The book argues that the business winners of the future are those that can deal proactively with chaos, and can see chaos as a source of market advantage, and not a problem to be got round. The book has a very strong chapter on quality in which Peters maintains that quality must always be defined in terms of customer perceptions. The quality revolution means 'eating, sleeping and breathing quality. Quality must be a management obsession'.

**Stebbing, Lionel (1989 2nd edition) Quality assurance: the route to efficiency and competitiveness.** Ellis Harwood

Another useful practical guide to QA written by a quality management consultant. A nuts and bolts book, it will be useful for people pursuing BS 5750.

## *Books and reports relating to QA in colleges*

### **Avon Evaluation Strategies Project (1989) Course review profile: general model.**

This is one of the most used of the Training Agency funded evaluation projects. The project's QAV model evaluates the access to the course, its quality, and its validity, through a series of questionnaires. The questionnaires are designed for use by the course team. Available from Avon Evaluation Strategies, Further Education Development Centre, Stiles Acre, Lawrence Weston, Bristol BS11 0QA.

### **Bedfordshire Quality Project (1989) An evaluation pack for course teams. Developing quality control and quality assurance systems in further education colleges. Bedfordshire LEA**

The Bedfordshire project views the course team as the primary custodians of quality and gives them the responsibility for maintaining standards. A useful evaluation pack has been produced by the course team.

### **Collins, David, Cockburn, Margaret, and MacRobert, Iain (1990) The applicability of BS 5750 to college operations. First year report. Sandwell College of Further and Higher Education**

This is a report of the first year of operation of the Quality Assurance project at Sandwell College which is designed to obtain BS 5750. The authors conclude that BS 5750 can be applied to colleges in a meaningful way, and if the standard is sensitively interpreted can be an aid to producing a framework for systematic quality development. They did not find that any of the procedures required to achieve the standard conflicted with good educational practice, and it is fully compatible with the requirements of external funding and examining and validating bodies. They point out that introducing BS 5750 does require extensive staff development. Finally, they argue that working towards BS 5750 has improved communications within the college and has not conflicted with staff conditions of service.

### **Further Education Unit (1989) Towards an educational audit. FEU**

Although not specifically written as a quality assurance manual **Towards an educational audit** provides a very useful model for assuring quality. The original intention of the project was to provide an aid for FE managers to carry out effective performance evaluation. It provides helpful guides and checklists for institutional self-auditing and evaluation.

### **Miller, John and Dower, Allison (1989) Improving quality in further education: a guide for teachers in course teams. Consultants at Work**

### **Miller, John and Inniss, Sonia (1990) Managing quality improvement in further education: a guide for middle managers. Consultants at Work**

### **Miller John and Inniss, Sonia (1990) Strategic quality management: a working paper. Consultants at Work/Training Agency**

A series of three essential booklets on making quality improvements in colleges. The authors argue that there are different quality obligations at three levels within the organisations — the course team, middle management, and strategic management. The authors' approach is based around student entitlements. Available from Consultants at Work, PO Box 19, High Street, Ware, Herts., SG12 0LE

These are useful guides to defining quality characteristics, and relating them to measures and standards at both the course team and middle management levels. The Miller model defines quality at a number of critical points in the students' college career — pre-entry, entry, during the course, and at exit — and seeks to aid colleges to define the associated quality characteristics.

### **Open College (1990) The management of quality. (2 volumes — A systematic approach, and Skills and techniques.)**

This is a practical guide to developing quality systems in education or training organisations developed by the Open College together with the Training Agency. The volumes include guidance on building the necessary techniques and procedures for institutions

looking to install a BS 5750 quality system. However, colleges who are looking to take a systems approach will find it of value even if BS 5750 is not on their agenda.

**Sallis, Edward (1990) The National Quality Survey. Mendip Paper MP009 Blagdon, The Staff College**

This report details the findings of the National Quality Survey carried out in the summer of 1990. The survey sought to establish the extent of the quality initiatives being undertaken by colleges in the UK.

**Training Enterprise and Education Division of the Department of Employment (1990) The management of quality: BS 5750 and beyond. HMSO**

This is a rewrite of a previous publication from the then TA — **Total quality management and BS 5750: the links explained**. These publications arise out of the TEED's interest in promoting TQM and BS 5750 in further education. The publication devotes more space to the practicalities of BS 5750 implementation than did the previous publication. It also outlines the TEED's own approach in its South West Regional Office, called 'Putting Customers First'. A useful introduction to both TQM and BS 5750. Available from The Training Quality Branch, Training Enterprise and Education Directorate, Employment Department Group, Porterbook House, c/o Moorfoot, Sheffield, S1 4PQ.

## *Articles*

**Stimer, Paul (1991) The skills magnet. Pickup in progress. Spring, pp12-13**

An interesting short article showing how Afan college has co-operated with Bosch in delivering total quality management programmes for the company's new operations in South Wales. Has a useful slant on how a major manufacturer approaches total quality training.

**Gold, Karen (1991) Customer satisfied. Pickup in progress. Spring, pp 16-21**

A useful journalistic review of some of the current initiatives and developments in quality and quality assurance in FE. It provides a number of useful short case studies and examples of how colleges are tackling quality issues.

**Sallis, Edward (1990) Corporate planning in an FE college. Educational management and administration Vol 18 No 2 pp 30-34**

This article provides a step by step account of how to apply the techniques of corporate planning to the development of a college mission and strategy.

**Sallis, Edward (1990) The evaluation of quality in further education. Education today Vol 40 No 2 pp 50-53**

The article argues that in a period of demographic change with the new accountability imposed upon them by the Education Reform Act, colleges will only prosper if they can provide quality training and education to their clients. In order to achieve quality, colleges need to have clear ideas of the standards they expect, and require documented procedures to guarantee their achievement.

**Whale, Elizabeth and Ribbins, Peter (1990) Quality development in education: a case of supported self-evaluation in Birmingham. Educational review Vol 42 No 2**

This article details Birmingham's experience of supported self-evaluation as an approach to monitoring and evaluation and quality development. The idea has been to replace the traditional model of external inspection supplemented by occasional institutional reviews — the inspectorial approach — with a systematic quality model based upon self-evaluation within colleges supported by an LEA co-ordinator. The paper shows how these ideas can be exported into the schools sector.

# About the Mendip Papers

The Mendip Papers are a new series of booklets written specially for managers in further and higher education. As managers and governors take on new responsibilities and different roles they face new challenges, whether in the areas of resource and financial management or in the pursuit of quality, the recruitment of students and the development of new curricula. The Mendip Papers provide advice on these issues and many more besides.

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