

This essay will argue that the principles of Total Quality Management do have something to offer schools in the way of improvement in student and teacher operations. Whilst many theories of management and leadership have been developed and applied to schools, it is rare for those theories to originate in an educational context. I would suggest that this does not mean that they ought to be ignored, or at the other extreme, implemented without questioning the appropriateness of application. A reference to Sergiovanni's work (1996) will be used as part of the analysis because he typifies the kind of resistance to the use of business management approaches in education.

The issue of quality is a very important one for schools, and one, which must be dealt with, in the current community and political context. The tools provided by the writers in this field (TQM), both in terms of language to discuss the issues and statistical tools to enable the analysis of data, provide a way to engage in the whole issue of quality in education, not provided by other approaches.

Introduction

As much as we might want schools to be separate from a political context, they are not. There could be no more compelling example of this than the recent release from Dr Kemp (Federal Minister for Education) of the results of a literacy survey of Australian children and the associated comment and press coverage. Morgan and Murgatroyd (1993) discuss the nature of the education 'crisis' which compels schools and education systems to look for ways to improve, to make the most of the resources and to avert what might be seen as a crisis in confidence in public education. They describe the situation facing governments of many countries in the world - an increasing unwillingness to pay more for education, whilst

expecting more from education in terms of services and outcomes. In this same equation is the decreasing level of 'real' funding compared with the increase in actual costs of education.

The expectation and costs are unreasonable without some sort of change.(p4)

The underlying dynamic is that schooling is shifting from a public service driven by professionals towards a market-driven service, fuelled by purchasers and customers. (Morgan and Murgatroyd (1993) p1)

Many governments see investment in education as a key to competitive advantage with other nations and yet the expected returns are not forthcoming. (ibid p16) In such a context, there is pressure on the education sector to not only deliver outcomes, but provide evidence of improvement and evidence of 'value for money'.

Management Practices

Arguments can be put that many of the current management and leadership practices used in education, are not well suited to bring about improvement in schools, which is significant and sustained. Current management processes have been found to be ineffective in implementing agreed policies, and dealing with the management of change (Bowring-Carr and West-Burnham 1994 p 2) and also adequately addressing quality. At the risk of over-simplifying, I want to consider theories of management and leadership in education, falling into three groups. They are : those which utilize business management practices as though education is a business, those which seek to apply business management practices where they are useful and relevant, and those who reject this application and offer criticism on the basis that education is not a business.

The outcomes of the first group have often been to overlook the complexity of schools and to apply the practices to the administration of schools, not the "educational processes which

are core business of schooling" (Cuttance p105). Cuttance suggests that this has been true of some of the applications of TQM. There are, however, some current approaches (e.g. Morgan and Murgatroyd) which are in the second category and offer useful background for leaders of schools seeking to focus on quality.

Sergiovanni (1996) falls into the third category. In his book, "Leadership for the Schoolhouse", he describes three theories from business which find themselves applied in various forms in schools. The Pyramid Theory is a description of the typical hierarchical system manifested in top-down decision-making and a series of levels of managers each supervising those 'below'. The Railroad Theory (Scientific Management or Taylorism) describes the standardisation of work practices and the 'laying of tracks' so that "...all that needs to be done is to teach people how to follow the tracks" (p11) following the 'one best way'. This was based on the popular model at the time of the 'rational-economic man' based on a view of people as motivated by material gain (Dept of Statistics notes 1995). Sergiovanni points out that this view may be appropriate for some organisations, but in schools they lead to inappropriate bureaucracies and things like 'teacher-proof' and 'learner-proof' curricula and materials. The key problem with them both is the separation of conception from implementation - the planning from the doing. The application of knowledge from the fields of Psychology and Social Psychology highlighted previously unconsidered social factors and their relationship to productivity. This included Maslow's hierarchy of needs, the articulation of Theory X and Theory Y and the implications for management style (Dept Statistics notes (1995)) This enabled theories of management to take on a human relations approach 'softening' a hierarchical or scientific management structure. In these theories, the leader or

manager utilises various 'styles' and approaches to motivate workers, or manage them in achieving the organisation's goals.

Sergiovanni describes a third theory from business called the High Performance Theory.

This is a version that includes management by objectives, where people are connected tightly to outcomes but loosely to the means. He suggests that, where this is slightly better than the first two theories - this still involves a level of "bartering of rewards and punishments for compliance as a way to connect people to each other and their work." (p14) Sergiovanni puts much of the Total Quality Management work in this latter category. He feels that "at its base the importation of TQM to schools keeps in place the key principles and structures that embody traditional management theories." (p16) He also implies that one of the problems with management in schools is the lack of clear approach, rather:

Rarely are any of the three theories implemented alone in schools. Instead, their pattern of use seems to be developmental. Instead of replacing older theories completely, each newcomer ...becomes an add-on to its predecessors. (Sergiovanni 1996 p15)

It may be true that this 'eclectic' approach of schools is one of the causes of the problems with management and leadership theories in schools. However, I believe that his view of TQM, as stated above, is based on a superficial account of the TQM literature and an unwillingness to deal adequately with the reality of the current educational context. An education-derived concept of leadership and management, as described in Sergiovanni's book, may well be desirable, but in the current context offers very little practical assistance to schools or principals in dealing with political and community arguments about schooling which are based on business metaphors.

I believe that a theory for the schoolhouse should strive to transform

the school into a center of inquiry - a place where professional knowledge is created in use as teachers learn together, solve problems and inquire together...(it) should encourage principals, teachers, parents and students to be self-managing, to accept responsibility for what they do, and to feel a sense of obligation and commitment to do the right thing.
(Sergiovanni 1996 p 27)

There is nothing in the above definition that could not be achieved by applying some of the essential principles of TQM, if it were viewed that the school as a centre of inquiry was a sustainable quality process, which enabled continual improvement. Without some consideration of the 'quality' of what was achieved in a 'centre of inquiry', the above definition is a very weak basis for addressing accountability concerns. The definition also supports a "sentimental philosophy in which most teachers were trained and acculturated into the profession" (Morgan and Murgatroyd 1995 p 99). This 'anti-management posture' presents teachers and schools as altruistically concerned with caring and not with the harsh demands of the economy.

To some extent, therefore, a false and dichotomous view of caring and learning, or learning and effectiveness, has ...arisen in the occupational culture. (ibid. p99)

I do not believe that the implementation of TQM principles in an educational setting, excludes considerations of other theories of administration or leadership as a way of informing understanding of the context and of issues relevant to education or society in general. Examples include Critical Theory as an approach to values in administration (Evers 1995 p5-6). The implementation of any process or set of principles without thinking and evaluating their appropriateness would be a mistake. A critical stance within the application of some form of quality management is important to be alert to the applicability of this group of theories. Being able to acknowledge and engage in the debate about quality and its management, whilst keeping educational concerns uppermost, enables one of the key roles

of a principal in collaboration with other principals, at least as seen in South Australia, as influencing education policy. What follows in this essay, is a brief background to TQM and a view of its applicability to the field of education.

What is Quality?

One of the main consequences of reluctance amongst teachers and schools, to take on ideas from industry and business, has been a difficulty in dealing with the issue of quality and developing 'an emphasis' to the word 'quality' which is more appropriate to a service context than a manufacturing one. In the 'anti-management culture' described by Morgan and Murgatroyd previously, what is seen to count, as 'quality' has been part of the professional realm of teachers. The view that teachers are professionals is often seen as sufficient justification for a certain action, particularly when related directly to the events in their classroom. Cuttance (1994) states, quite rightly in my view, that "Much of the discussion of quality in education...has not focussed on the needs of the users but on the needs of the providers of the service" (p99). One of the important aspects, then, to the application of TQM to education and schooling is a working definition of 'quality', which is appropriate and useful and brings in to play a focus on the users or consumers of the service. There is a sense in which 'quality' does have a different meaning in the service context.

In the service industry, services are sold or contracted first and then produced and consumed, with production and consumption possibly being simultaneous. For manufacturing, the implication of this distinction is that quality is essentially about conformance to product specification whereas for the service industry, quality is essentially about the customer/user focus because this customer dimension is embedded in the whole transaction from initiation to completion in the service context. (Morgan and Murgatroyd 1995 p 9)

During and immediately following World War II, efforts to improve quality were based on Quality Control. Quality Control developed acceptable quality levels incorporating a certain defect level. "This meant that management learned to rely on inspection and rework to insure that the customers got a product resembling what they ordered." (Crosby 1994 p 1) The concept that 'error was inevitable' arose from these practices. This was not a very satisfactory definition of quality for industry and certainly not for education. Further work in the field of quality management came from writers such as W.E.Deming, J.M.Juran, P.B.Crosby, K Ishikawa, and G Taguchi. Their writings offered a consistent move away from quality control, incorporating a fundamental shift in thinking. This shift in thinking, attributed mainly to Deming, involved the concept that quality could be built in to the process rather than, through end inspection, discovering bad quality (Box 1993 p6). The focus of the early writers in TQM also placed great emphasis on meeting consumer's needs and on the extensive educational training needed in quality improvement methods for management and the workers.

Space doesn't permit full detail of the important points from each writer (but are available in Dept Statistics notes 1995). In an overview of these views, Deming was able to condense his Quality Management philosophy into '14 points of obligation' for managers. Paine et al (1992) have summarised these in an account of Deming's 4 beliefs.

1. People are purposeful, cognitive beings with an intrinsic desire to learn and be innovative
2. All organisations are viewed as systems. The activities are aimed at the mission of the organisation and management's task is to work on the system.
3. Everyone within the system needs the same theoretical knowledge.
4. The processes within the system, not the worker, cause most of the variation within the system. Improvement in variation is as a result of improvement in the processes.

Juran developed an approach to Quality Planning of 5 key points. He was much more structured than Deming and more concerned with the specifics of implementation. Juran envisaged a number of improvement projects going on at once. The decision for which projects, could be made by a Cost of Quality (COQ) calculation to determine the 'return on investment'. Many organisations saw this approach as more practical and requiring less upheaval than Deming's approach. If it were a choice of beginning the process or not, Juran's approach might provide a modest starting point. Ishikawa developed a quality philosophy of 9 points and pioneered the development of Quality Circles and the use of 'the 7 tools'. Taguchi developed 7 key points of a quality philosophy and developed the Quality Loss function, and finally, Crosby developed 14 steps to Quality Improvement and pioneered the notion of zero defects (University of Newcastle notes Module 2 1997 p3-17). The work of the quality writers has points in common and also significant differences when it comes to applying their work to the field of education.

There are differing definitions of 'quality' within the field of TQM , the sense of which is somewhat dependent on the industry to which they are applied. Murgatroyd and Morgan (1993) suggest that there are "3 basic definitions of quality - quality assurance, contract conformance and customer-driven " (p45). They suggest that a focus on quality, applicable to education, relies on aspects of all three - a move to balance quality assurance with contract conformance and customer-driven quality (p45 -46). All have limitations in regard to education and schooling, when applied in isolation.

Contract Conformance

In this area, specifications of what is quality , is customer driven, and so determined locally via a 'contract of service'. This approach has been emphasised by Crosby. In 1961 he

developed the notion of zero defects. By 1965, Crosby had incorporated the cost of non-conformance in the company's (at ITT) accounting system. He found the cost was over 20% of revenue in manufacturing and 35% of operating costs in service. (Ibid p2)

The definition of quality is conformance to accepted requirements ...If quality is looked at as some variable that's 'known when it's seen' then there's no chance of a consistent operation. Definitions such as 'delighting the customer' or 'excellence' have no common understanding. Conformance to agreed requirements eliminates the mindset that quality is a variable. (Crosby 1994 3-4)

Crosby has identified his 14 steps to achieve conformance, which includes the formation of quality improvement teams, the establishment of baseline data and 'corrective action' to correct problems identified in the process. The process then starts again in an improvement cycle. Other writers like Deming and Juran do not adopt this kind of approach to conformance. Its usefulness to education would not be as an isolated approach but may provide an impetus to some much needed reflection on the customer expectations of the education process.

Quality Assurance

Quality assurance involves the documentation of practices and procedures in an effort to comply with standards developed by an expert body. There is accountability for these standards, and in the business sector, this is usually by inspection. Cuttance describes Quality Assurance in the public sector as involving the identification of those features of a service which are of significance to users and their needs, assessing problems and deficiencies, implementing improvements and monitoring the situation (p101). He agrees with Morgan and Murgatroyd that these explicit standards required are different from the usual 'intra-professional' perspectives of quality (p102). He makes an interesting point concerning the need to PROVE quality for the purposes of accountability, but IMPROVE quality for the

purposes of development of the organisation. These two aspects are important in the current educational context because they tend to be intertwined in the political arena. Cuttance believes that Quality Assurance should ideally be integrated with a quality management approach (i.e. not implemented on its own) to achieve the ongoing commitment to improvement in performance and productivity. Cuttance talks about uncoupling the proving from the improving if there is to be effective review process within the school.

...a requirement that school self-evaluation or internal review serve strong accountability purposes considerably reduces its potential usefulness for development purposes.
(Cuttance 1994 p108)

Customer-Driven Quality

This concept is at the heart of the quality revolution and requires organisations to look at processes to better meet the needs of customers(Morgan and Murgatroyd 1993 p46). Most of the quality writers, and especially Deming and Juran, have built in customer-driven quality to the whole process of quality management.

Total Quality Management

Quality Management involves everyone in the organisation cooperating to continuously improve the way in which they meet their customers needs and expectations in the provision of products and services (Dept Statistics notes 1995). It is useful to differentiate different approaches depending on the level and pervasiveness of the adoption across the organisation- Quality Assurance as described above, Quality Improvement, Quality Management and Total Quality Management. In the latter, all aspects of the organisation are adopting continued quality improvement requiring a fundamental change in the organisational ethos and culture. Different writers locate their work at various levels. Whilst

there are some differences between writers in this field, these are many concepts in common.

Each of the essential common concepts will be discussed below.

(i)The Quality Process: a change of focus

TQM is more about getting everyone to be committed to the ideal of total quality than about the delivery of quality products. Developing these ideas requires a well-defined structure of educating and training for management (Sutcliffe and Pollock 1992) in (Hodges 1995 p96).

One of the key points in the Quality Management literature is that the implementation of quality processes requires that change at the whole company or school level. This involves recognition that there are a chain of customer-supplier relationships which are mediated by processes. This involves a whole new way of thinking, crucial in the eyes of all the quality management writers. Bonstingl (1992) describes the four pillars of total quality, which incorporates this thinking.

1. The organisation must focus first and foremost on its suppliers and customers.
2. Everyone in the organisation must be dedicated to continuous improvement, personally and collectively
3. The organisation is viewed as a system and the work of those in it, seen as ongoing processes.
4. The success of TQM is the responsibility of management. They are responsible for the development of the 'deep' culture of quality focus. TQM is a long-term commitment, which they must demonstrate.

In applying the above to a school context, the school's culture and subcultures form the context for such changes, and it is this, to a large degree, which shapes staffs involvement in the change process and determines the degree to which proposed changes are successful (Hodges 1995 p96). One of the most important concepts associated with TQM to be applied to schools, is the notion of a chain of customers and suppliers and the way that this influences the understanding of quality improvement and change. "Each person is dependent on both the last and the next in the chain for the successful completion of an important transaction" (Morgan and Murgatroyd 1993 p52).

Quality comes through process improvements intended to make sustainable differences to the outcomes of these processes...leadership for vision ,quality and performance, and leadership for control, are two different action-sets...To secure sustainable quality performance improvements for a school requires visionary leadership, which supports and enhances the work of those closest to the customer.
(Morgan and Murgatroyd 1993 p xi-xii)

The kind of leadership that supports the front-line teachers and workers, implies an understanding of the detail of customer-supplier practices. Morgan and Murgatroyd add to the four pillars described by Bonstingl by stressing :

- The best people able to make the process improvements are those nearest to the customer i.e. teachers
- The strategy a school operates from involves a choice. The response of the market place to this choice is crucial to a school's success.

The focus of TQM on whole organisational change has some similarities to the work of Senge on learning organisations. Senge believes that those organisations capable of surviving and prospering are learning organisations and he sees his work dovetailing with the Total Quality Management movement (p10) He states that 3 sets of guiding ideas are critical.

Learning in organisations means the continuous testing of experience, and the transformation of that experience into knowledge- accessible to the whole organisation, and relevant to its core purpose. "
Senge et al 1994 (p49)

Given that teachers, managers and leaders in schools, are more familiar with Senge's work or perhaps find its jargon more acceptable in an education context, it could be a useful springboard for the implementation Quality Management in school.

(ii)Scientific use of data

The process for improvement relies upon the use of data within a problem-solving approach. Combined with the range of tools available through the QM approach, teams of people can support a future course of action by evidence and data. Scholte supports the

scientific approach of incorporating the use of data into the group process as fundamental to the clear decision-making process. The mechanism for collecting data is important because it needs to be readily available on a regular basis to be of most use to quality improvement teams.

This aspect perhaps has scope to make the most significant impact on schools, the functions of teams within them and their decision-making processes. In my view this is the area which schools, particularly those in South Australia have not adequately addressed. Based upon personal reflection of my own school context, the industrial campaign of 1996 created an ethos which equates improvements in teaching with teaching conditions and professionalism as being above or beyond question. The culture of improvement tends to be focussed on improvement of administration or procedures that will make students more compliant. In this context, the statewide process of allocation of profile levels has foundered and has been reduced to sampling of a small number in each school.

One of the major improvements in the school needs to be availability of data to examine the achievements of students, and a movement of the school culture in the direction of being prepared to take the risk to look at this data without being defensive. The next round of enterprise bargaining and the definitions of improvements in teaching adopted by the union (AEU) and the Education Department will influence the outcome of this.

(iii) Teamwork is essential

An important component in Quality Management is the work of teams. This was crucial to Deming's position in basing his approach on the adoption of quality processes throughout the whole organisation. Three basic types of teams are ***autonomous workgroups, quality circles***

and **cross-functional** teams. **Autonomous workgroups** and **self directed teams** are created to structure jobs around groups rather than around individuals. They are self managing, and are based on the underlying concept that those closest to the customers or the work itself will have the most insight regarding how best to perform those tasks or make improvement to processes. Kaoru Ishikawa pioneered the use of **Quality Circles** in the 1960s. "The benefits of Quality Circles are similar to those associated with employee empowerment - allowing employees to participate meaningfully in organisational issues and to use their education and creativity on job-oriented problems" (Dept Statistics notes 1997). Organisations use **cross-functional teams** to bring together expertise from several areas to work on a single project usually with a management representative.

Some of the problems with the operation of teams have been a lack of understanding of how they operate - this would be particularly true in schools, as they have tried to devolve decision-making without the appropriate knowledge. Scholtes (1994) has detailed a structured approach to problem solving, through groups by focussing on the use of data and evidence rather than opinion and the use of statistical tools and other tools in analysis. He points out that teams need training in the process and support.

(iv) Planning is important

There is agreement amongst the quality writers about the importance of planning. Both Deming and Juran for example have planning cycles. Deming's wheel encompasses

- Plan develop plan of action, training for staff, research performed
- Do implement plan, observe, and collect data
- Check analyse data, conclusions, feedback
- Act corrective action based on check stage

The cycle then begins again. The Juran trilogy includes Plan, Control, Improve and there are other variations which include SDSA (Standardise, Do, Study, Act) detailed by Gitlow (1995). Gitlow's version of this cycle involves actions that would not be acceptable to the education community. These involve not so much the development of best practice methods, but their standardisation and the consequential training and compliance expected of the use of this method. "They must be educated about the need to reach consensus about one best practice method" (Gitlow p25). Gitlow presents an argument that everyone using different methods increases variation and hence reduces quality. Training should be sufficient to enable the employee to be in a state of 'statistical control' (p29). This is not the kind of argument or process which would be picked up in schools, and indeed may not be very useful to the process of teaching.

Deming's 'wheel' appears to be more akin to the action-research cycle with which educators are more familiar. Those who have engaged in this kind of improvement cycle would have the question its viability on a wide scale across an entire organisation due to the difficulties in managing such a process with many groups operating at once. However, it does lend itself to the kind of improvement project model of Juran, which might be more practical in schools.

Quality in Schools

Considerations of what is quality in a school setting, brings together aspects of the quality conformance and customer-driven perspectives, especially when focussing on the processes of teaching and learning. One aspect of this is the quality of student work. In his article about "The Quality School", Glasser takes a view that one of the problems with current management of schools concerns the lack of support for high quality work by the students.

He believes that the system sends a message of acceptance of low quality work because high quality work:

does not include enough of the low quality school-work that standardised, state mandated achievement tests measure. Nothing of high quality, including school-work, can be measured by standardised, machine scored tests. (Glasser 1990 p428)

He adds to the notion of what quality is in schools by saying that an aspect of it involves high quality work from students. He goes on to then use this to define high quality effective teaching as being able to convince "essentially all of his or her students to do high quality work in school".

This means to do work up to their capacity so that there is no need to divide students into tracks and reserve a large number of spaces in a low track for those who 'lean on shovels'. (Glasser 1990 p429)

Unfortunately, this definition is a bit circular. We have to ask about the determination of a student's capacity. This comment about 'high quality work' sounds a bit like those writers who define quality by 'you know it when you see it'. However, it does start to get to the core of the work in schools - the daily experience of teachers and students in negotiating the acceptability of the work they produce. Schlechty (1990) takes the discussion of student work further. He suggests that if we take a conformance approach, we need to specify just what the requirements are. Both locally and Nationally within Australia, arguments about literacy standards and the use of benchmarks, attempt to provide such a specification. Schlechty puts an interesting point in relation to this.

One of the requirements is that students must succeed in doing the work assigned...it does mean that schoolwork which students cannot do and at which there is little prospect of future success, is not quality schoolwork. Thus quality schoolwork for one student may not be quality schoolwork for another...Students cannot learn from an assignment they do not complete, any more than a manufacturer can make a profit

from a product no one will buy... Schoolwork has no quality if the students don't do it.(Schlechty 1990 p58-60)

Schlechty makes it clear that any conformance definition would struggle in relation to quality schoolwork. He moves it to being defined by the customer - the needs of the student. He identifies quality indicators:

- The student can do what he/she is expected to do
- The student is motivated to do what is expected
- The student persists with the task when he/she does not meet immediate success
- Student satisfaction in the work or its consequences is such that students are motivated to do similar work in the future.
- The cumulative effect of the above is that students learn things that are valued by the community, parents, teachers, and by the students themselves.(p60)

When one links the above outcomes to the responsibilities of teachers and say that Quality teaching enables the above indicators to be seen, we start to see the level of complexity in discussing quality in the 'core business' end of schools. Glasser agrees that quality teaching is perhaps the hardest job there is, because it involves people management with a group of young people who might be among the most resistant to doing as the teacher asks (p429).

This may well be one of the stumbling blocks along the way in developing notions of quality concerning schoolwork. One ends up with statements about effective teaching which teachers relate to an inspectorial method of supervision and develop a focus which teachers find threatening. Defensiveness is then connected to the possibility of the assessment of teacher quality on the basis of student behaviour, which they cannot control.

Glasser discusses the option of lead-management for teachers rather than boss-management, as being more likely to increase motivation and the quality of student work. Glasser points

out that Quality Management in schools must facilitate learning and not work against it. He says that:

We need to accept the fact that the majority of boss-managed students see little chance of satisfying their needs by working hard in school and we cannot boss them into doing more... students don't see what they have to do as having quality, so they won't produce high quality. (Glasser 1990 p433-434)

Using the issue of quality schoolwork, it may be not very useful to pursue a path of trying to define quality in schools precisely. At least, not at the stage that most schools are at in their culture of quality improvement. It might be more constructive to work on access to relevance data and involving teachers and other school employees in its analysis and recommendations for action on the basis of that. This has the potential of reducing the fear or threat associated with this kind of focus by empowering teachers with the information and the authority to make changes to changes to their practice. It also has the potential for teachers to take ownership of such a process, reducing the cynicism they have for many of the initiatives arising from external sources.

Problems with the application of TQM

A number of writers have commented on characteristics or 'sins' (Crosby) of failed efforts to implement TQM. These points are valid in business organisations and in schools. They are not unlike many indicators of management or leadership behaviour to avoid in the effective schools literature.

They can be summarised as:

- **Lack of clear shared mental model of quality** in the organisation (Senge p446-453) so each employee develops their standard or definition of quality (Crosby 'sins' in Cornesky p45-47)
- **Lack of shared values and vision** for the organisation. (Senge p446-453) or constancy of purpose (Deming's diseases in Cornesky p30)

- **Compliance** rather than commitment as the driving force. (Senge p449)
- "Steel-reinforced concrete silos" in the organisation (Senge p450) with **strong barriers between departments.**
- A **non-systematic approach** to implementation. (Senge p452) including resourcing for innovation. (Deming's diseases in Cornesky p30)
- Senior managers with incomplete transformational leadership skills. (Senge p453) and put an **emphasis on short term results.** (Deming's diseases in Cornesky p30)
- **Management does not take responsibility** for problems (Crosby 'sins' in Cornesky p45-47)
- **Inability to learn collectively.** (Senge p453) and making rating and annual review a fear driven exercise. (Deming's diseases in Cornesky p31)
- **Mobility** of top management (Deming's diseases in Cornesky p32)
- Lack of analysis of whether the product matches the published requirements and the development of an extensive 'remedial' network to take corrective action. **Management does not know the cost of this non-conformance**(Crosby 'sins' in Cornesky p45-47)

One of the others problems with TQM is the confusion with aspects of Quality Assurance and Quality Management. HCI (1) believe that the key to understanding QM is to separate it from QA, because assurance was developed for quite different motives. QA involves standardisation of processes and procedures whereas "TQM involves constantly re-evaluating the processes and changing them so that they work better for the company and the customer". This is highlighted in the companies adopting predominantly QA and becoming fixated on the word quality as a product, rather than the process of achieving it (HCI (2)). "fixing only the product does not improve quality long-term" (HCI (3)) The essence of TQM is process improvement - it is more important than the result.

The issue of quality improvement or management in an educational organisation might be usefully divided into issues concerning the organisation and the service, and the academic quality of the 'product' (Chadwick 1995) The separation of the two enables some useful insights about particular obstacles in such an organisation. "the admirable principle of academic freedom...may provide a convenient smokescreen for those reluctant to allow

scrutiny of teaching quality or the sharing of good practice" (p41) and some staff "resent customer approaches" because they are seen as the "problems of management rather than a challenge to rethink teaching methodologies and assessment strategies" (p41).

All of the above issues and problems are relevant for the implementation of Quality Management in both business organisations and schools. There are some additional ones brought about because of the schooling context. Morgan and Murgatroyd (1995) identify challenges to the adoption of TQM in schools (p99-103).

- Anti-management language and rejection of industrial models - discussed earlier
- Professional autonomy - quality individualistically defined by the professional
- Classrooms as islands - process of teaching and learning so complex as to not be open to scrutiny
- Product of inputs - belief that student achievement depends on inputs like class size, student abilities etc
- Perception of doing well under the circumstances - organisations staying within their comfort levels if they appear under current measures to be OK
- Centralised decision-making - the Principal has traditionally been responsible for implementing departmental plans, which have been similar for all schools. Current contexts have brought about competition and quasi- market strategies.
- Lack of commitment to 'corporate' endeavours - restricted and limited view of responsibility for own students not the whole school etc.

Conclusion

Having explored the basics of Total Quality Management, and the issues and problems associated with its implementation, I believe that the approach does have something to offer schools. It provides a language and tools to explore various aspects of schooling which have previously been ignored. There are a number of reasons for this ignorance. The ones which ring true in my own context are - the kind of culture and ethos surrounding what is regarded as professionalism in teaching and the lack of knowledge of relevant tools for planning,

collecting, investigating and analysis of data concerned with the school context. Within the first area of the culture of professionalism there are two sub-points. These are :

- the unwillingness to accept the concept of customer-supplier chains because the education sector are more used focussing on the needs of the provider rather than the customer
- the definition of professionalism in the school context placing a heavy reliance on impressions and opinion rather than evidence and data.

I agree with Hodges when he states that the only threat from TQM lies in the ignorance of its benefits to the whole educational community. TQM far from threatening educational excellence can be used to foster it. (Hodges 1995 p96)

Bibliography:

Bonstingl, J. (1992) The quality revolution in education. ***Educational Leadership 50*** in ***Statistics and Quality Management in Education Course Notes 1997*** Dept of Statistics, University of Newcastle: "Principles of Quality Management"

Bowring-Carr, C and West-Burnham, J (1994) ***Managing Quality in Schools - a training manual*** Longman Group London

Box, G (1993) 'Quality Improvement - The New Industrial Revolution' ***International Statistical Review***, 61 (1) p3-19

Chadwick, P (1995) 'TQM at South Bank University: issues in teaching and learning' in ***Quality Assurance in Education*** Vol3 (1) 39-44 MCB University Press

Cornesky, R (1991) 'Approaches to Total Quality Management' Chapter 1 in ***Implementing Total Quality Management in Higher Education*** (provided reading) in ***Statistics and Quality Management in Education Course Notes 1997*** Dept of Statistics, University of Newcastle: "Principles of Quality Management"

Crosby, P. (1994) 'Quality: Getting it Right' in ***TQM in Higher Education*** April 1-3 accessed from gopher://deming.eng.clemson.edu/00/pub/tqmbbs/misc/crosby.txt

Cuttance, P. (1994) 'Quality Assurance in education systems.' ***Studies in education evaluation*** 20, 99-112

Evers, C.W. (1995) 'Recent Developments in Educational Administration' in ***Leading and Managing*** Vol 1 (1) Autumn , Australian Council for Educational Administration (Vic)

Gitlow, G et al (1995) ***Quality Management: Tools and Methods for Improvement***. Burr Ridge, Illinois: Irwin, 2nd edition, pages 24-29, 107-109.

Glasser, W (1990) 'The Quality School' ***Phi Delta Kappan*** 71, 425-435

Hard Copy Interactive (HCI)(1) 'Quality Management equals QA plus TQM'. <http://www.hci.com.au/hci/articles/qatqm.htm>

Hard Copy Interactive (HCI)(2) 'Is Quality a losing strategy '. <http://www.hci.com.au/hci/articles/losing.htm>

Hard Copy Interactive (HCI)(3) The process is more important than the result '. <http://www.hci.com.au/hci/articles/process.htm>

Hodges, C. (1995) 'Quality in Education - Hope or Threat?' in ***Ensuring Quality in Education : Selected papers from the 1994 Australian College of Education National Conference, Launceston, 28-30 September*** Deakin ACT, Australian College of Education.

Juran, J (1993) 'Made in U.S.A : A Renaissance in Quality.' *Harvard Business Review* 71 no5, 42-50

Morgan, C and Murgatroyd, S (1993) "Definitions of Quality and their implications for TQM in schools." in *Total Quality Management and the School*. Open University Press, Buckingham, Great Britain.

Morgan, C and Murgatroyd, S (1995) *Total Quality Management in the Public Sector*. Open University Press, Buckingham, Great Britain.

Paine, J Turner P & Pryke R (1992) 'The Quality Movement.' Chapter 1 in *Total Quality in Education*. Ashton Scholastic, Sydney.

Rinehart, G (1993) 'The Education Transformation.' Chapter 4 in *Quality Education: applying the philosophy of Dr W Edwards Deming to transform the educational system*. (provided reading) as part of *Statistics and Quality Management in Education Course Notes 1997* Dept of Statistics, University of Newcastle: "Principles of Quality Management"

Scholtes, P.R. (1994) Learning to Work Together. Chapter 6 in *The Team handbook for Educators - How to Use Teams to Improve Quality*, Madison, WI:Joiner Associates.

Senge, P et al (1994) *The Fifth Discipline Fieldbook* Nicholas Brealy Publishing Ltd Great Britain

Sergiovanni, T (1996) *Leadership for the Schoolhouse*. Jossey-Bass Publishers San Francisco.

University of Newcastle, Dept Statistics (1995) 'An Introduction to Quality Management' in *Statistics and Quality Management in Education Course Notes 1997* Dept of Statistics, University of Newcastle: "Principles of Quality Management"

University of Newcastle, Dept Statistics (1997) 'Principles of Quality Management' in *Statistics and Quality Management in Education Course Notes 1997* Dept of Statistics