

THE APPLICATION OF THE EUROPEAN FOUNDATION FOR QUALITY MANAGEMENT EXCELLENCE MODEL

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A case study related to the deployment of the European Foundation for Quality Management Excellence Model. The focus is upon the established methodological approach rather than the confidential results of the adopted process. However, the method deployed provides a valid and reliable approach for other construction-related schools so that they too can obtain the benefits of EFQM Excellence Model implementation. Incorporated within the text shall be the most appropriate ways of conducting the self-assessment exercise. Thus, the full advantages of such an analytical approach can be obtained.

Keywords: total quality management team, continuous improvement, self-assessment.

INTRODUCTION

This paper is aimed at establishing a valid methodology for implementing the European Foundation for Quality Management Excellence model within construction related educational establishments.

As economic demands and higher construction student expectations relating to quality are placing more strains upon educational institutions, there is an increasing need for a holistic way of meeting these sometimes diverse demands. Few are willing to define quality in Colleges and Universities, although many claim to know intrinsically when it is present. Similarly, faculty and administrators alike are reluctant to call a student or anyone else a customer. This environment presents strong objections to the language, principles and methods of Total Quality Management (TQM). However, the principles of TQM are neither new or unique. Wasson (1993. 109) advocated that the requirements of TQM were "*simply good management codified*". Mooney opined further that: "*TQM makes the customer the focus of all decision making. In educational terms the external customers are the students and the parents and the product is learning. Teachers are 'service providers' providing the service of teaching*". (Mooney, 1993. 151). Therefore TQM could assist educationalists in viewing their actions from a perspective that has the 'customer/student' at the centre of its organisational activities. Howard, who implemented TQM within an educational environment, found that the "*key to effective TQM is to develop a position aimed at meeting our unique institutional needs in a manner that is consistent with our organisational culture and philosophy*". (Howard, 1993.110).

Further support for the deployment of TQM within education comes from Lozies and Teeter (1993.11) "*The TQM foundations for the pursuit of quality can have a powerful impact on efforts to improve higher education*." As a final point appertaining to the advocacy of TQM within education, Sutcliffe and Pollock (1992.26) stated "*You*

don't have to do this - survival is not compulsory." The basic necessity for the application of TQM within educational establishments is a workable and user friendly model. Such a model has been provided by the European Foundation for Quality Management (EFQM).

EFQM DEVELOPMENT

The EFQM Excellence Model has been used extensively and beneficially in manufacturing, banking and finance, **education**, management and consultancy. Companies apply the EFQM Excellence Model because the pursuit of business excellence through TQM is a decisive factor in allowing them to compete in today's global market. EFQM is a non-profit making organisation, providing various networking, benchmarking and training events to help members keep up with the latest trends in business management and research in TQM. It launched the European Quality Award in 1991 to stimulate interest and it is awarded to those who have given 'exceptional attention' to TQM.

EFQM's mission is:

- to stimulate and assist organisations throughout Europe to participate in improvement activities leading ultimately to excellence in customer satisfaction, employee satisfaction, knowledge management, impact on society and business results;
- to support the managers of European organisations in accelerating the process of making TQM a decisive factor for achieving global competitive advantage.

(European Foundation for Quality Management, 2000a)

The EFQM Excellence Model consists of 9 criteria and 32 sub-criteria. The five criteria on the left-hand side of Fig 1 are called "Enablers" and are concerned with how the organisation performs various activities. According to Hillman (1994:29) *"The enablers are those processes and systems that need to be in place and managed to deliver total quality"*. The four criteria on the right of Fig 1 are concerned with the "Results" the organisation is achieving with respect to different stakeholders. Hillman (1994:29) added that *"results provide the measure of actual achievement of improvement."*

Watson (2000:18) stated that "the EFQM Model provided a truly service focused quality system which had an inbuilt mechanism for the attainment of continued organisational improvement". Weile *et al.* (1997:248) identified that 'the criteria of the model helped managers to understand what TQM means in relation to managing a company.' However, managers also have to work at making the general descriptions of the criteria more specific to 'fit their particular situation and give them meaning within the context of their business activities'.

The improved EFQM Model is principally focused on:

providing a greater emphasis on the customer and on other stakeholder groups whose importance has been increasing, such as partners;

increased visibility of the value chain, including the increasingly important role of partnerships within the chain;

the emerging **importance of the management of knowledge** within organisations, the learning organisation culture, and innovation, as providing a key sustainable competitive advantage;

the **alignment of all corporate activity to the results** being sought and consequently to the organisation's policy and strategy.

(European Foundation for Quality Management, 1999)

Hillman (1994:29) suggested that 'the EFQM Model provided a tried and tested framework, an accepted basis for evaluation and a means to facilitate comparisons both internally and externally'.

OVERVIEW OF THE EFQM BUSINESS EXCELLENCE MODEL

The Model, which recognises that there are many approaches to achieving sustainable excellence in all aspects of performance, is based on the premise

excellent results with respect to Performance, Customers, People and Society are achieved through Partnerships and Resources and Processes. The EFQM Model is presented in Fig 1.

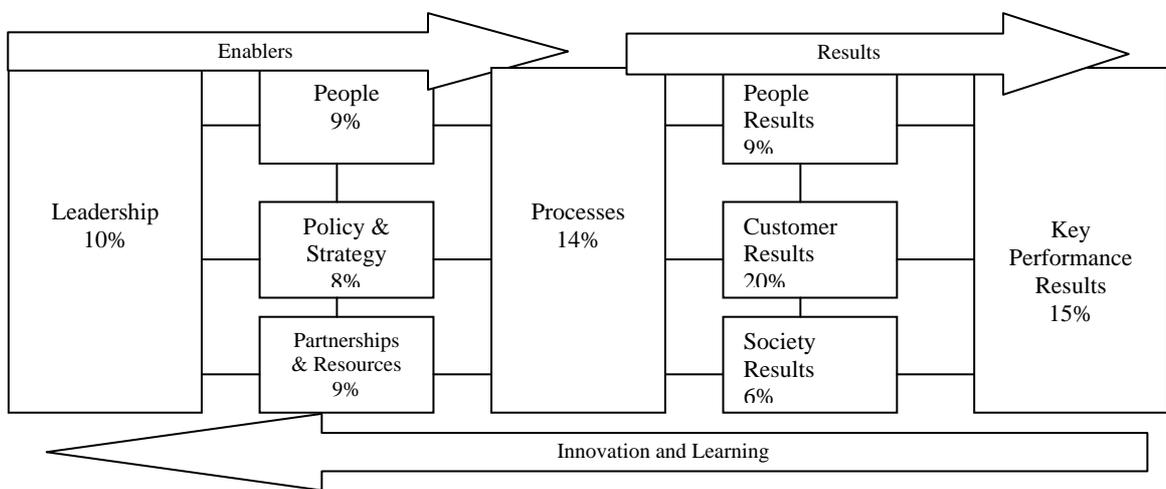


Figure 1 The EFQM Excellence Model (C) EFQM

The Excellence Model is based on the concept that both customer/ people satisfaction and positive impact on society are achieved through leadership driving policy and strategy, people management, partnership and resources and processes leading ultimately to excellence in business results.

MODEL DEPLOYMENT

Thus far an outline of the EFQM Excellence Model has been provided. However, what educational institutions need is a suitable methodology for its deployment. The following describes such a methodology and is based upon an actual case study. The focus of the case study is a School of the Environment and Development within a University. Data collected through model deployment is confidential but it is the process of implementation that is useful to other educational institutions and this is not confidential. Therefore both the process used and examples of the documentation employed will now be explored.

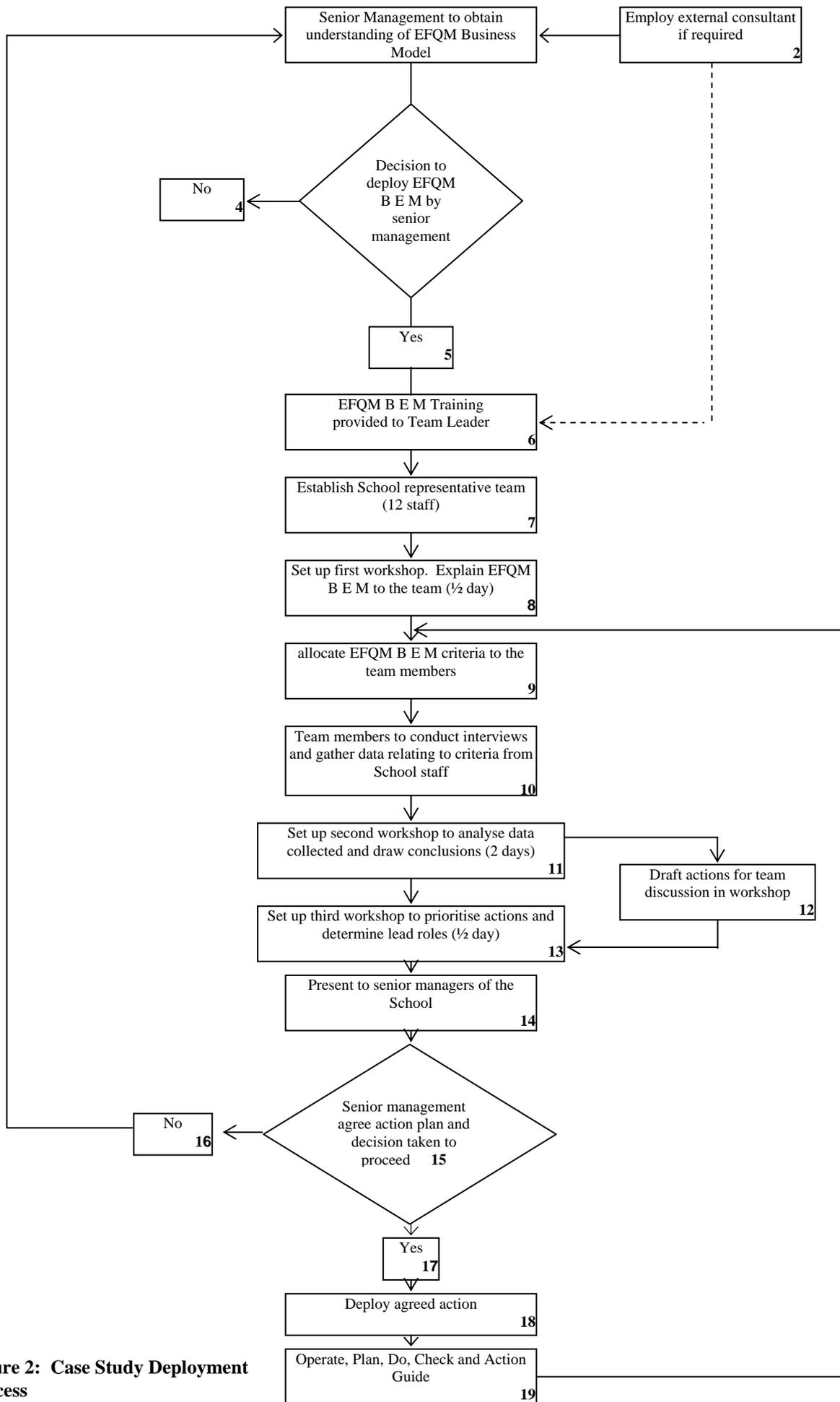


Figure 2: Case Study Deployment Process

RATIONALE FOR THE SELECTED METHODOLOGY

The main objective of the whole model deployment process was to establish some key action points focused upon the critical issues facing the School. Therefore it was vital that the resulting conclusions had validity. Thus a survey methodology was selected utilising the survey tools of questionnaires and semi-structured interviews. Two survey tools were used in order to obtain some triangulation of results. The EFQM produces a standard questionnaire for introducing the Excellence Model. There are two sets of questionnaire: one for employees and one for managers. Both of these were used. However, it was thought necessary to engage in some more probing questions with a representative sample of staff, and 60 semi-structured interviews were therefore conducted. It should be noted from Figure 2 that the School had previously been engaged in both Investors in People (IiP) and Work Life Balance (WLB). These two sets of activities had both been deployed using semi-structured interviews. It was important not to waste these two sets of valuable data. Therefore the results of IiP and WLB were mapped against the EFQM Excellence Model and their respective contributions incorporated. This process added to the rich array of data collected through EFQM model implementation.

COMMENCING MODEL DEPLOYMENT

It is imperative when deploying the model that senior management fully support the process. Having senior management support for the project is vital because TQM requires the total commitment of all staff within the host organisation. Furthermore, staff must be adequately resourced. These two key aspects are dependent upon senior management support (Oakland, 1993). Ensure that at least one person has undergone the EFQM Excellence Model training course. This is a comprehensive two day event based upon an actual organisation's results. The training will ensure an understanding of the Model and assist in its application. Figure 2 is a pictorial representation of the deployment process utilised in the case study.

The person who has undertaken the training should be appointed team leader. As depicted in Figure 2 (box 7) a team should be set up and consist of a representative sample of the School/organisation/department. This group of staff need to be introduced to the model and its implementational aspects. This is best done by way of a workshop of approximately five hours duration. Prior to this first workshop, reading material describing the model should be distributed for staff to read. At the first workshop the constituent parts of the model and its advantages should be explored. Once all staff have a reasonable understanding of the model they should be allocated in teams one or more criteria upon which to gather data. There are nine criteria and some staff will, therefore, work on more than one. It is preferable that at least two staff are allocated to each criteria. Some mutual support can be obtained by working in teams of two. Overall support can be provided by the team leader.

Figure 2 (box 10) refers to interviews. It is important that a representative sample of staff, both academic and administrative/support are selected for a semi-structured interview; great consideration, therefore, should be given to this critical activity. Within this case study sixty interviews were conducted. These provided representation at all levels and functions. Also researchers were interviewed in order to ensure a truly representative sample. In order to assist other institutions in deploying the model pro formas are included. However, due to the word content of this publication, only samples can be incorporated. In the first stage of conducting

interviews, therefore, the criteria of 'Leadership' (enabler) and 'Key Performance Results' have been presented for the reader.

Table 1 Leadership shows the format of the pro formas utilised during the semi-structured interviews. Staff are asked to comment upon the table headings. As an example some fictitious data has been incorporated.

Table 2 will incorporate responses relating to the strengths (and weakness) areas for improvement. Again sample data is included.

Table 3 provides the opportunity to establish specific actions. It also allows for scoring. However, it is suggested that scoring is not undertaken during the first round of model application. Poor results could act as a demotivator and cause implementational problems. At the end of Figure 2 Deployment Process Model, the final box states "Operate Plan, Do, Check and Action cycle. This box (19) has a connecting arrow line back to box 9 which is the allocation of criteria. This is the commencement of the second round of deployment. This will start once the actions established during the first round have been addressed. Scoring can commence during round two.

Table 1: Leadership 1a How Leaders develop the mission, vision and values and are role models of a culture of Excellence

What is the top level approach, philosophy or vision that addresses this issue?	What are the activities that you undertake which turn your overarching approach into action?	How widely is the <u>approach</u> actioned across all areas and down through the staff structure?	Is the <u>approach</u> (not the activity itself) checked to ensure it is still effective, lessons are learned and improvements made?	Are there any key issues highlighted, external to organisation or implications, or validating comments?
Actively encouraged involvement with stakeholders	Business Planning Customer surveys	Varied dependent upon specific activity but generally well deployed	Not in a holistic manner	Requires a coherent strategy

Table 2: Leadership 1a How Leaders develop the mission, vision and values and are role models of a culture of Excellence

Strengths (According to the evidence available)	Areas for Improvement (According to the evidence available)
Leaders knowledge of the external environment plus consultation with views and needs of staff to develop a vision that is not in conflict with staff	Leaders to engage in personal improvement activities, for example 360° appraisal

Table 3: Leadership 1a How Leaders develop the mission, vision and values and are role models of a culture of Excellence

Suggested actions for tackling areas for improvement	Score achieved	
Development of a 'Best Practice Guide' covering aspects such as leadership style, communication, motivation and delegation	Approach	%
	Deployment	%
	Assessment Review	%
	Overall	%

Results Measured	How Result is Measured	Results			Trends			Comparison against Best in Class			Key Causes/ Comments
		Actual (Unit)	Agreed Target	Difference	Is there evidence to show that results are getting better over a 3 year or more period			Are our results good or bad compared to those identified as best in class? (where appropriate)			
					Yr1	Yr2	Yr3	Yr1	Yr2	Yr3	
What are the results that are actually being measured in this area?											Which approach directly impacts on this result
Retention	Cohort stats M & D audit informally through S/S liaison and course committees										
Good Hons	% of 1:2i:2ii achieved										
Employability	First destinations report										
Student intake	RICS tariff										Required for accreditation
Research	RAE										
Work planning	SSR's Costs per student										

Table 4 Key performance Results 9a: Key Performance Outcomes

<u>GUIDANCE NOTES</u>	
Review your descriptions of the <u>results</u> as a whole, then record your views on where things have been successful, where improvements could be made and actions that could be taken based on your analysis of the current situation. <u>Your views must be based only on the evidence gathered and recorded in the previous page not on your existing knowledge of what you yourself understand may be the current situation which may not be evidenced.</u>	
Strengths (According to the evidence available)	Areas for Improvement (According to the evidence available)
<ul style="list-style-type: none"> Employment of Students 	<ul style="list-style-type: none"> Deployment of the School's new LTA strategy

Table 5 Key Performance Results 9a : Key Performance Outcomes

SUGGESTED ACTIONS FOR TACKLING AREAS FOR IMPROVEMENT	SCORES ACHIEVED	
1. Promote the outcomes of the LTA strategy - benefits of the projects, added value	Results	%
	Scope	%
	Overall	%

Only Leadership sub-criteria (a) has been provided in the example, this again being due to limited wordage. The process will be the same for the rest of the sub-criteria.

Table 4 gives the format for responses related to key performance with some examples included. Table 5 again is a partial SWOT analysis with suggested actions for improvement. The above process has to be conducted on all criteria with the sampled staff base. Once this has been done all the data has to be coordinated into a coherent document. A second workshop is necessary to work through all the data. It is suggested that the team be provided with the complete set of data one week before the workshop. An electronic version of the data should be used at the workshop to enable alterations to be made during the discussions.

At the second workshop criteria leaders are asked to talk through collected data and a team agreement is obtained on the action points to be taken forward.

After this has been done and copies printed off the EFQM team of twelve staff were split into three groups of four and each group asked to take specific aspects of the actions. 6.

The groupings were:

Group 1	Group 2	Group 3
Key Performance Indicators	Strategy	Leadership
Management Information Systems	Partnerships	People and Values
Processes	Resources	Communications
Customers	Customers	

At the end of this session each group presented their action points. Figure 2 box 11 moving to box 12 establishes where the action points were written up and if necessary (as was the case) grouped. This was done in order to produce a coherent set of actions for discussion and prioritisation at workshop three. Table 6 Key Action Points - Workshop Three

Key Action Areas	Impact *H/M/L	Difficulty *H/M/L	Resource *H/M/L	Timescale +S/M/L	Ranking
KPIs					
1. Identify appropriate, relevant and balanced set of KPIs (incorporating University KPIs) to assess current performance, linked to core processes and disseminate results to inform future actions (feed forward and trends analysis)					
To include:					
<ul style="list-style-type: none"> • Customer/clients/students • Internal and external stakeholders • Staff • Communities 					

* H=High, M=Medium, L=Low

+ S=Short, M=Medium, L=Long

Upon completion of this task the team leader wrote up in a coherent fashion the action points ready for workshop three. Table 6 is the pro forma used for this process. Table 7 contains one example for KPIs, the other ten action areas were also dealt with in the same manner.

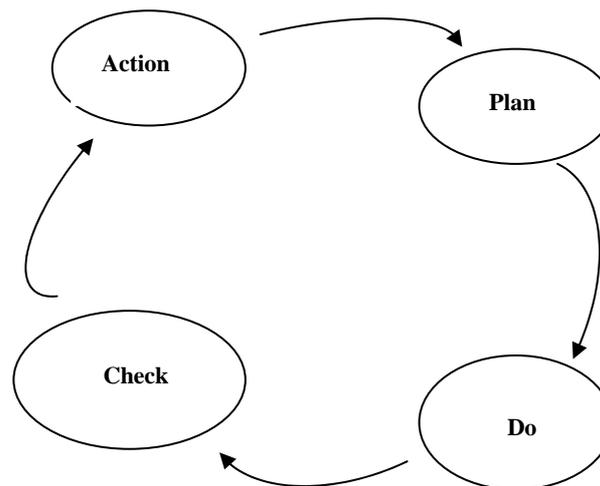
Once this process had been completed by the team leader the set of actions were disseminated to the whole team one week before workshop three. The team were asked to read, identify their scores relating to each action for: Impact, Difficulty,

Resources and Timescale, e.g. for KPIs action point impact ranked Medium; Difficulty : medium; Resources : Low; Timescale : Short term and Ranked (out of the eleven action areas) sixth.

At workshop three a full and frank discussion was held and the resulting outcome was to agree the team's view regarding the scores for the column headings and rankings. A member of senior staff was identified to champion the action point(s). (Box 13 on Figure 2). As indicated on Figure 2 (Box 14) the next stage was to present the action points to the School's senior management team and Director of School. This was done and the agreed action points ranked in priority order were then deployed commencing with a full explanation to all staff. (Box 18 of Figure 2).

The School is currently at the deployment stage and will then move to Figure 2, Box 19, to employ the Plan, Do, Check and Action Control Cycle. This will require re-working the whole cycle to test the impact of the deployed actions upon the School. During this second round the full model should be used incorporating the scoring system. Only the trained team leader and/or external consultants should engage in scoring out of the 1,000 points. It is very important not to forget that the model is based upon continuous improvement. Figure 3 depicts the Plan, Do, Check, Action, Cycle based upon Dr Deming's model for Control.

Figure 3 Action Control Cycle



SUMMARY

The authors of this paper have endeavoured to outline the methodology used to deploy the EFQM Excellence Model. The documentation employed has been incorporated for other organisations to use or adapt as required. The methodology has worked very well and the team feel that real progress has been made. The Model has certainly enabled senior staff to focus upon the key issues facing the School. By working through the model organisations are obliged to conduct a thorough self analysis related to their critical success factors. Not only are evaluative comments developed but also proactive solutions. The School feels confident that the advocated advantages noted by the EFQM are attainable in practice.

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