

# Applying principles of total quality management to a learning process: a case study

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## ABSTRACT

In pursuit of quality, educators and learners must be continuously engaged in a process of finding opportunities for improving the learning process, the quality of the learning experience and the way it is delivered. In this article two principles of TQM: (i) Focus on the needs and expectations of customers and (ii) Be committed to continuous improvement, are applied to the assignment and assessment system in the module: Personnel Management (a component of a postgraduate degree in education) as taught at a distance education university. Both qualitative and quantitative methods were used to collect feedback from learners. The responses of learners indicate that the needs and expectations of the majority of learners were met by the assignment and a system of self-assessment. In the light of learners' expectations the article concludes with strategies to improve the current assignment and self-assessment system.

application of the TQM philosophy to the education sector. For instance the Baldrige Award, instituted in 1987 in the United States, has set a national standard for quality and hundreds of organisations, including service organisations such as schools, use the criteria to pursue ever-higher quality in systems and processes (Swift, Ross & Omachonu 1998:351). Being quality and service minded in education means relating to and caring about the goals, needs, desires and interests of customers and making sure they are met (Whitaker & Moses 1994:76). It is important to know that all processes in any organisation contribute directly or indirectly to quality as the customer defines it (Swift *et al* 1998:93). Applying this principle to education means that the learning process needs to be assessed to determine the quality as defined by the learner. This will determine whether learners' needs have been met (Arcaro 1995:24).

This approach is also applicable to distance education where teaching and learning is separated in terms of time, place and space. A constant danger in distance education is that the "faceless" numbers of learners may become invisible to educators (Wilcott 1995:41). However, these "unseen" learners are a most important category of customers. Learners' views offer crucial information to lecturers and their expectations need to be considered, respected and met (Van Niekerk & Herman 1996:44). Ramsden and Dodds (1989:16) regard learners' perceptions of content and teaching as central to the evaluation of a course because the effectiveness of their learning is not related to the *educators'* interpretation of the course but to the *learners'* own experiences. Recent policy developments in higher education in South Africa are likely to lead to increased evaluation of teaching and courses through the use of learner evaluation. Moreover, when implementing a Total Quality Management (TQM) perspective, a focus on the customer should shape the way things are done in distance education (cf Fields 1993:96).

## INTRODUCTION

Ideas of quality were originally developed in the 1930s and 1940s primarily by W Edwards Deming, a statistician who was best known for helping postwar Japanese business to become number one in quality in the world (Sallis 1993:15). He first visited Japan in the late 1940s and returned in 1950 when he encouraged a group of Japanese industrialists to make a nationwide assault on inferior quality. Deming supplied a simple answer to the dilemma of poor quality: find out what customers want. The resulting approach is popularly known as Total Quality Management (TQM).

Literature reveals that there is a growing interest in the

In pursuit of quality in distance education, educators and learners must therefore be continuously engaged in a process of finding opportunities for improving the learning process, the quality of learning experience and the way it is delivered (Schön 1983:49; Schargel 1994:3; Greenwood & Gaunt 1994:156; Wilcott 1995:39). Reflection is seen as a natural part of teaching and serves as a tool for quality assurance (Ramsden & Dodds 1989:2; Jedrzejewski 1995:23; Van Niekerk 1995:103). Reflection is concerned about the effects of teaching on students' learning and is regarded as a process by which educators collect information about their work and make judgements about actions that might be taken to improve student learning (Gastel 1991:343; Jedrzejewski 1995:27).

While researching TQM, it came to my attention that the principles of TQM are applicable to any process in the education sector. I was therefore interested to ascertain insofar the assignment and self-assessment system of the module: Personnel Management succeeds in non-intentionally applying principles of TQM, particularly with regard to meeting learners' needs and identifying strategies to improve the assignment and assessment process used in this module.

## PROBLEM STATEMENT AND AIM OF ARTICLE

There are various teaching and learning processes involved in any module offered to learners. The assessment system of the module in question comprises *inter alia* an assignment that is designed in such a way that it allows learners the opportunity to engage in a meaningful exercise of self-assessment. The assignment comprises an integrated system of activities that have to be executed and assessed in terms of certain criteria embedded in the total study package. It is not an assignment with a typical answer component that is evaluated by means of a simple mark sheet or memorandum. The aim with such an assignment was not to enable the learner to "perform" better, but to learn better. Since quality refers to every process in a system (module), a review of the assignment and its assessment constitutes a valuable indicator of whether quality has been attained. To extend the discussion of the quality of learning and learners' perceptions of the assignment and assessment system, the following research question is posed: What is the result of the application of principles of TQM to the assignment and self-assessment process in the module: Personnel Management? The following related subquestions emerged: What is the approach to student learning in Personnel Management? How was the assignment

and self-assessment system for the module taught in 1998 designed? Did the assignment and self-assessment system meet the needs and expectations of learners? How can the assignment and self-assessment system be improved for future learners?

The aim of the article is to

- outline the approach to the module: Personnel Management
- describe the assignment and self-assessment system in Personnel Management set in 1998
- determine how the needs and expectations of learners were met by the assignment and self-assessment system
- explain how the assignment and self-assessment system could be improved to meet learners' needs and expectations.

## DEFINITION OF CONCEPTS

For the purpose of this article, two important concepts need to be defined.

### Total Quality Management

Total Quality Management focuses on achieving quality and can be defined as a philosophy and a set of guiding principles that intend to meet and exceed the needs and expectations of various external and internal customers (Bradley 1993:169; Herman 1993:2; Pike & Barnes 1994:24; Greenwood & Gaunt 1994:26). The second focus is on the acceptance and pursuit of continuous improvement as the only useful standard or goal of attaining quality.

### Self-assessment

Self-assessment is defined as the process in which the learner determines the extent of his or her knowledge and skills in a field of study by assessing his or her responses to activities in assignments (cf Van Kraayenoord & Paris 1997:525). This includes the reflection on certain appropriate activities for the sake of improved performance in future situations (cf Stallings & Tascione 1996:548). The needs of educators may not be the principal reason for adopting a self-assessment system of evaluation. The focus should rather be on the benefit for the learner and aims of the educational process (Purdy 1997:135). The outcomes of such an assignment should therefore not be compared to or measured against the outcomes of the other traditional learning exercises. Often, as is the case here, such assignments

and their self-assessment systems are not “mark driven” and are not “passed” or “failed” in regular terms.

## RESEARCH METHODS

Although Deming (1986:71) rejects measures which are “totally incompatible with never-ending improvement”, he insists that numerical data and evidence should be gathered wherever possible to identify important areas for improvement. TQM advocates that determining customers’ needs through empirical data provides data for making effective decisions (West-Burnham 1992:40,41). According to Weller and McElwee (1997:209), experience and intuition are not sufficient to base decisions on. Thus for the purpose of this research two methods suggested by Ramsden and Dodds (1989:17) and Prosser and Trigwell (1990:141) were used to collect feedback from learners.

According to the first method, a questionnaire in the form of an activity log was compiled consisting of 94 items. This activity log for which learners received no credits upon submission, was employed to assess learners’ perceptions of the assignment and self-assessment system used in 1998. There were ten activity logs, one for each activity in the assignment. Learners had to complete the corresponding activity log after completing an activity in the assignment. More or less similar aspects in each activity were measured in the activity log: ability of activity to hold learners’ interest; whether the activity was understood; relevance of the activity for practice; whether the activity could be completed within the suggested time allocation in the timetable; and marks obtained after marking the activity. The latter item was included after a recommendation was made by learners enrolled in 1996 who indicated the importance that marks held for them. A number of general comments at the end of the questionnaire focused on learners’ perceptions of the self-assessment system as a whole. A total of 303 questionnaires, which constituted 62,3% of the total population of learners (ie 486) enrolled for the module, was analysed. An optical mark reading card was used to “read” the activity log 14 days after the due date of the assignment. Due to possible postal delays, many assignments reached the university too late to be analysed by the optical reader.

According to the second method, data were collected during a seminar presented to learners enrolled for the BEd: Educational Management in September 1998. The total of 148 learners who attended the seminar were organised into buzz groups of four or five and

asked to comment on their experience of the assignments and the self-assessment system in the module. “Rich” expressions enabled learners to give a true reflection of their feelings and experiences. It also served the purpose of interpreting data obtained from questionnaires. Non-leading questions were asked about the present system, for example: “What is your perception of the assignment and self-assessment system in Personnel Management” and “How does self-self-assessment affect your learning?” A total of 37 responses was collected and analysed.

## THE APPROACH TO THE MODULE PERSONNEL MANAGEMENT

The BEd specialisation course: Educational Management is a postgraduate course offered through distance education at the University of South Africa. It comprises four modules, one of which is Personnel Management. The course serves as preservice management training for a large number of learners who are teachers as well as inservice training for learners who are school principals, deputy principals, heads of departments or employed in regional or head offices of Departments of Education.

The main approach to learning materials underlying Personnel Management is similar to those of the *Learning Paradigm* (Steyn 1997(b):81). According to the latter the learners are the main agents in the process who actively discover their own meaning by being involved in doing things and thinking about their actions (Leder 1993:12; Barr & Tagg 1995:21; Bonwell & Eison in Hobson 1996:45). This allows practitioners to reflect on actions and to identify alternatives for improved future performances (Hobson 1996:45; Tanner & Jones 1994:415). Within the Learning Paradigm reflective practice therefore plays a significant role. Through reflective practice, practitioners (the learners) reflect on past and present actions with a view to improving future performances in their practices (Kottkamp 1990:183; Hart 1990:153).

The reflective practice model derived from Schön signals the identification of reflection as an essential part of learning, professional growth and development. This model seemed very appropriate for educating and professionally developing educational managers in Personnel Management because it allows for learners’ (practitioners’) reflection in and on action (Schön 1995:34; Griffin & Kilgore 1995:56).

Considering the above, it becomes clear that learners have assumed a central position in the approach to

the module (cf Osterman 1991:214; Steyn 1997(b):82). Leder (1993:6) agrees with this strategy by stating that learners should be active participants in the learning process and not merely passive recipients of information transmitted to them by others. In this approach the model of lecturer as expert has given way to the educator as facilitator in the teaching and learning process (Greenwood & Gaunt 1994:150; Houser & Vaughan 1995:9).

### **Overview of the development of the assignment and self-assessment system**

The current assignment and self-assessment for the module: Personnel Management was introduced in 1996. Furthermore, data was collected and analysed during 1996 to determine the perceptions of learners with regard to the assignment and self-assessment system (Steyn 1997(a)). The findings provided evidence that learners enrolled during 1996 had an overwhelmingly positive perception of the assignment and self-assessment system (Steyn 1997(a) & Steyn 1997(b)).

Since it usually takes a year to review a teaching and learning strategy at a distance education institution and a further year to introduce a new strategy, a similar assignment and self-assessment system was used in 1997. In addition to the data which showed that the majority of learners were satisfied with the 1996 assignment and self-assessment system, learners' examination results in 1997 also reveal an interesting picture. Traditionally the examination pass rates of learners serve as an education quality indicator, although this indicator is not the emphasis of Total Quality Management (Aspin 1988:15; Husén 1990:81). Mass inspection, such as considering the pass rates of learners, can form part of quality control in TQM but should be part of an overall quality culture to be effective (Williams 1994:19). According to TQM, results of tests and examinations do not necessarily reflect a learner's progress or learning experience (Arcaro 1995:64). Marks should rather be de-emphasised and life-long learning emphasised instead (Fields 1993:62).

### **Improving the 1996 and 1997 assignment and self-assessment system**

Although the data had indicated a positive response of 1996 learners to the assignment and self-assessment system, the need arose to improve the process since commitment to continuous improvement is viewed as an important principle in TQM (Arcaro 1995:64; Swift *et al* 1998:95) When reviewing the

responses of learners, the so-called "voice of the customers", the lecturers responsible for the module were concerned about the logistics around the process whereby feedback was given to learners on their assignments, the so-called "the voice of the process" (cf Greenwood & Guant 1994:45). Moreover, conversations with learners showed that the majority merely took cognisance of the marks obtained for activities and the general comments on the assignments. Even where learners paid careful attention to the lecturer's comments, it was likely that learners had forgotten some of the content of the assignment after six weeks, the general time span needed for an assignment to be returned to a learner. This brought into question the level of learning considering when feedback to the assignments was provided. It was assumed that if knowledge and skills could be repeated and inculcated within a shorter time span, the quality of learning could improve. Another concern was the large number of requests made by phone for extension of submission of assignments. If learners planned the completion of assignments better, the process could be more effective. Considering the above, in Scherkenbach's terms, the two "voices", that of the customer and the process, were out of line and needed to be realigned (cf Greenwood & Gaunt 1994:47). This paved the way for adaption of the assignment and self-assessment process.

The very positive response to the assignment and self-assessment system during 1996 encouraged the lecturers to improve the process even further. During 1998 a single, extensive assignment was set which consisted of ten activities linked to the ten topics covered by the module. A suggested timetable for completion of these activities throughout the year was provided to help learners plan their work. Upon registration learners received the ten activities for the assignment as well as a detailed memorandum with a marking schedule for these activities. It was suggested that learners first attempt the questions themselves before consulting the memorandum. In the case of uncertainty, they had the opportunity to see what is expected of them and then to develop their own answers creatively. Since the activities were designed to reflect learners' personal involvement and experience in various practical situations, the copying of answers to these activities was unlikely. Before submitting their assignments, learners were required to award their own marks according to the marking schedule provided in the guidelines of memorandum. It was again emphasised that the marks awarded indicate learning successes and experiences and not "passes" or "failures". A learning experience should not be quantified in terms of pass or fail.

## FINDINGS AND DISCUSSION

The definition on TQM highlights the needs and expectations of the customer and continuous improvement in all processes (Bradley 1993:169; Herman 1993:2; Pike & Barnes 1994:24; Goetsch & Davis 1995:4; Swift *et al* 1998:1). This section reports on the application of these two quality principles: (1) whether the needs of learners (*internal customers*) have been met in the assignment and self-assessment system and (2) strategies to *improve* the process in the module: Personnel Management.

### Have the learners' (customers') needs and expectations been met?

TQM advocates a customer-focus where new ways to meet and even exceed customers' expectations have to be found (Barry 1991:5; Weller & McElwee 1997:209). Quality will unlikely improve without this recognition. In this section the focus is on learners, categorised as internal customers, to whom "education" in the form of an assignment and self-assessment system has been supplied (Fields 1993:23; Sallis 1993:31; Greenwood & Gaunt 1994:27; Arcaro 1995:31). As indicated earlier, ten activity logs were designed to determine learners' experience of each of the ten activities in the assignment. A number of items in these activity logs was similar. Table 1 indicates the range of responses to these items.

factor that could have led to the negative response is that the medium of instruction of the majority of learners (93.1%) is a second or third language. This factor could influence the time needed by learners to understand the activity, do the background reading and formulate answers to the assignment. Another factor that could play a role is the number of courses for which learners are enrolled since this affects the time available for each module. The majority of learners (71.0%) are enrolled for five or more modules, a heavy burden considering that only approximately 1% of learners are full time learners or unemployed.

Table 2 indicates the responses of learners to the assignment system and its self-assessment.

Table 2 shows that the level of difficulty of activities in the assignment was acceptable to 87.8% of learners enrolled for the module. Learners' responses to items 85 and 93 indicate that the majority (73.6%) liked the assignment system where they controlled their own work during the year. A smaller percentage (64.3%), however, preferred the single submission date for the extensive assignment. This means that some learners (33.3%) feel more comfortable with a series of deadlines for submission of assignments, a practice they are more familiar with in other modules in the course.

Due to the very positive response to the assignments

*Table 1*

*Range of responses to items in the activities*

ITEM	RANGE: STRONGLY AGREE/AGREE
The sub-activities of activity X succeeded in holding my interest	91.0–95.1%
I understood the activities asked	91.7–95.1%
The work which is covered in the activity is relevant for my practice	94.1–95.7%
Considering the scope of the topic, the amount of work which was covered in the activity is just right	85.8–91.8%
I completed the activity within the three weeks time limit as suggested by the study programme in the tutorial letter	39.3–56.1%

Responses to all the activities were very positive, except for the item dealing with the time suggested for completing and assessing the assignment. One

as set in 1996 similar types of activities were set for learners in 1998. The qualitative data shows that learners' perception of the type of activities of

*Table 2*  
*Responses to general comments of the self-assessment system*

ITEM	OPTION	FREQUENCY	PERCENT
Q6 How would you rate your general knowledge of Personnel Management before registering for the module?	Unknown	2	0.7
	Poor	85	28.1
	Fair	155	51.2
	Good	57	18.8
	Excellent	4	1.3
Q84 The level of difficulty of activities is acceptable for B Ed students.	Unknown	8	2.6
	Strongly disagree	5	1.7
	Disagree	24	7.9
	Agree	131	43.2
	Strongly agree	135	44.6
Q85 I like the progressive assignment system of this module where I control my own work schedule through the year.	Unknown	25	8.3
	Yes	223	73.6
	No	55	18.2
Q86 I prefer this assignment system where I submit only one extensive assignment consisting of various activities.	Unknown	6	2.0
	Strongly disagree	55	18.2
	Disagree	47	15.5
	Agree	122	40.3
	Strongly agree	73	24.1
Q87 The availability of the answers to the activities helped me a lot in completing the assignment satisfactorily.	Unknown	6	2.0
	Strongly disagree	6	2.0
	Disagree	18	5.9
	Agree	118	38.9
	Strongly agree	155	51.2
Q88 Compared to other assignment systems, I prefer the immediate available answers to my activities rather than to wait for them after I have mailed my assignment.	Unknown	8	2.6
	Strongly disagree	6	2.0
	Disagree	18	5.9
	Agree	118	38.9
	Strongly agree	133	43.9
Q89 The progressive assignment system, with the immediate available answers, provides valuable learning experience.	Unknown	7	2.3
	Strongly disagree	11	3.6
	Disagree	35	11.6
	Agree	104	34.3
	Strongly agree	146	48.2
Q90 A lecturer can expect a student on B Ed level to be responsible enough to complete each activity before consulting the memorandum.	Unknown	8	2.6
	Strongly disagree	12	4.0
	Disagree	19	6.3
	Agree	108	35.6
	Strongly agree	156	51.5
Q91 As adult learner the progressive assignment system helped me to take responsibility for my own learning.	Unknown	6	2.0
	Strongly disagree	2	0.7
	Disagree	6	2.0
	Agree	118	38.9
	Strongly agree	171	56.4

ITEM	OPTION	FREQUENCY	PERCENT
Q92 The fact that only credits for the examination entrance were awarded for the assignment as a whole does not affect the learning opportunity created by it.	Unknown	7	2.3
	Strongly disagree	20	6.9
	Disagree	33	10.9
	Agree	140	46.2
	Strongly agree	103	34.0
Q93 I prefer to submit one extensive assignment rather than a number of assignments with specific due dates throughout the year.	Unknown	7	2.3
	Strongly disagree	48	15.8
	Disagree	53	17.5
	Agree	94	31.0
	Strongly agree	101	33.3
Q94 I feel better equipped as an educational manager after completing the progressive assignment.	Unknown	7	2.3
	Strongly disagree	1	0.3
	Disagree	7	2.3
	Agree	79	26.1
	Strongly agree	209	69.0

assignments set in 1998 concurred with the perception of the learners of the type of activities set in 1996 which were discussed earlier in the article. They viewed the assignments as “challenging”, “thought-provoking”, “interesting”, “enjoyable”; “relevant for our practice” but also “time-consuming” and “demanding”.

Moreover, when the learners’ appraisal of their knowledge and skills of Personnel Management **before** doing the assignment is compared to how they felt **after** the assignment had been completed and self-assessed, there is a considerable increase. In Table 2 95.1% of learners believed that they were better equipped as educational managers after they had completed the assignment compared to 28.1% of learners who believed they had poor knowledge at the outset, 51.2% who were of the opinion they had fair knowledge and 20.1 % who thought they had good or excellent knowledge of the field of Personnel Management. This relates to the goal set for the module: To develop learners’ knowledge, skills and attitude in the field of Personnel Management.

Although the questionnaire did not explicitly measure learners’ perceptions of self-assessment, learners responded spontaneously to this type of assessment in the buzz groups. The overall responses of learners to self-assessment were very positive. The majority of responses ranged from “It is a good method of studying effectively” to “We like the assessment system”. A few responses had a quality undertone: “Self-assessment has improved our standard of compiling an assignment”; “Self-assessment is the

best way for Postgraduate learner in that it helps us to determine our progress in a continuous manner”; “Self-assessment serves as a quick judgement of our abilities and how we can improve on certain aspects”; “The system helps us students to know as to whether we are moving towards the right direction in as far as Personnel Management is concerned” and “It allows us as students to critically look at what we have written and improve it”.

Three responses refer to learners’ affective experience of self-assessment: “It is exciting to have the opportunity to evaluate your own work”; “The assessment motivates us to become responsible for our studies” and “Self-assessment is a good thing to do because it awakens us in such a way that we get involved in our work”.

A large number of groups indicated the positive influence of self-assessment on their learning. The following responses illustrate their views: “Self-assessment is very important because it encourages us to learn effectively”; “It [self-assessment] is a good method of studying actively”; “It [self-assessment system] helped changing us from a lazy student to a hard working student”; “Self-assessment contribute positively to learning because we get the opportunity to look deep into our work and critically analyse it, see our shortcomings and are able to correct our mistakes”; “It [self-assessment] gives us time to correct our mistakes before we submit the assignment. In some cases it helps when we do not understand what is needed by the question”; “It [self-assessment] makes us to work actively with

understanding and encourages all people to participate. It facilitates our learning"; and "...[Self-assessment] is very good idea, because it encourages self-discovery and helps in self-understanding".

A few buzz groups expressed their concern about self-assessment. Responses included the following: "It is impossible to assess ourselves because what we wrote is what we thought is correct"; "Self-assessment may be regarded as important to the university, but to us it is not important because we doubt ourselves until the lecturer has marked it"; "It [self-assessment] doesn't give us any oomph to write assignments when we know they will be returned unmarked"; and "The self-assessment system makes us nervous, because we don't feel relaxed when we think of the assessment coming ahead". This last group, however, acknowledges that self-assessment "urges the student to be more attentive and well-prepared. It reinforces hardworking in the part of the student".

According to Table 2 90.1% of learners said that the immediate availability of a memorandum helped them considerably in completing the assignment. Fewer learners, but still the majority (79.5%), preferred the immediately available answers to activities. Two of the items focus on the responsibility of learners in the assignment system. 87.1% of learners agree that a lecturer can expect a learner to be responsible for completing activities before consulting the memorandum and 95.3% of the learners are of the opinion that the assignment system helped them to take responsibility for their own learning. This was confirmed by the following responses from buzz groups: "It [Self-assessment] encourages us to work and reach the goal"; "Self-assessment teaches us to control our work and be responsible"; "It [self-assessment] encourages us to work hard as individuals at one's own pace."

For many buzz groups the immediate feedback to the assignment by means of a memorandum was positively perceived. A number of responses give proof of this: "Self-assessment is good because we get feedback immediately and we get direction"; "The memorandum gives us a chance to go through our work again and in the mean time it gives us a chance to correct ourselves"; "We can recognise our mistakes and are able to correct them without wasting time repeating the mistake"; "The immediate answers to the assignment are beneficial and very important in order to assess and identify different problems and problematic areas of the topic"; "The assessment system provides a valuable opportunity for students not to wait for weeks and weeks before they receive their assignments"; and "The memorandum helps us

to discover a lot of mistakes which we were unaware of." One group's response, however, indicates a negative perception of the memorandum. "The feedback is not specifically criticising my way of writing. When we mark, we are not able to give ourselves the exact mark as we will even try to cheat ourselves".

The university has a number of examination credit systems for assignments. One system is to provide the necessary credits for examination admission on submission of assignments. In this system it is possible that no marks are rewarded for the assignment. In the assignment system used in Personnel Management learners had to mark their own activities, but the mark was not considered for admission credits. This again emphasised the fact that the assignment was to be used by the learner as a learning tool and was not to be seen as an instrument indicating success or failure. All assignments which are submitted receive the required credits for examination entrance. Although many learners may be "conditioned" to a mark (or grade) for assignments, 80.2% of learners agreed that the mere awarding of credits did not affect the learning opportunity created by the assignment. This was also positively perceived by one buzz group: "It is rare to find failures because students who have submitted assignments actually acquire the prescribed credits." The fear of failure can have a detrimental affect on learning (Arcaro 1995:64).

A few learners referred to the effect of self-assessment on other areas in their life. The following comments serve as examples: "It [assignment and assessment system] gives us knowledge of management at school"; "It [assignment and assessment system] gives us a chance for knowing our staff and pupils at school"; and "It is important to every human being to have self-assessment in life". Two groups indicated the positive effect of the assignment and self-assessment system when preparing for the examination.

The afore-mentioned paragraphs provide ample evidence that many learners' needs and expectations were met. Deming's theory has been adapted by Greenwood and Gaunt (1994:150) to teaching and learning to provide a list of "key dos and don'ts". When the latter is applied to quality teaching and learning in the module: Personnel Management, the following can be highlighted:

- Accepting the limitations of the research design, the assignment and assessment system seem to have succeeded in *transforming the attitudes and expectations of learners*. In the questionnaire 95.3% of learners indicated that the assignment

and self-assessment system helped them to take responsibility for their own learning. Qualitative responses which indicate a change in attitude are: "It [self-assessment] helped changing us from a lazy student to a hard working student"; "Self-assessment is a good thing to do because it awakens us in such a way that we get involved in our work" and ; "The assessment motivates us to become responsible for our studies". The assignment and assessment system succeeded in meeting the aim of quality education by empowering learners to take control of their own learning and by putting them in the centre of the whole process (Greenwood & Gaunt 1994:151). The joy of work that is central to Deming's philosophy (Schmoker & Wilson 1993:16) was also detected in learners' perception of the assignment and assessment system. As regards the assignment learners indicated that the activities were "enjoyable" and "exciting". Concerning self-assessment the following response illustrates some degree of joy: "It is exciting to have the opportunity to evaluate your own work."

- *Learners must be encouraged to choose, plan and organise their own work.* From the questionnaire it is clear that 89.8% of learners liked the assignment system where they were able to control their own work schedule through the year. Qualitative responses to prove this include: "It encourages us to work hard as individuals at one's own pace"; "It teaches us to control our work and be responsible"; and "The system helps us students to know as to whether we are moving towards the right direction in as far as Personnel Management is concerned."
- *All courses should, where possible draw, on real-world experience.* The ten activities in the assignment required learners to take a close look at their own situation. In their response to the relevance of each activity for their practice in the questionnaire, the responses ranged between 94.1–95.7%. Two qualitative responses which suggest this point are: "It gives us knowledge of management at school"; "It gives us a chance for knowing our staff and pupils at school."
- *Teaching methods adopted are important.* The Learning Paradigm and reflective practice that were described earlier; underpin the approach to the module. Learners were active participants and assumed a central position in the approach to the module. This is confirmed by the following response: "It [self-assessment] makes us to work actively with understanding and encourages all people to participate. It facilitates our learning." Lecturers assumed the role of facilitator thus assisting learners to become co-responsible for their own learning.

### Commitment to continuous improvement

As indicated earlier, only minor adjustments to the assignment system were made during 1997 after the 1996 survey of learners' perceptions. Acknowledging the perceptions of learners enrolled in 1996 was a considerable risk especially with regard to the self-assessment system which was undertaken in 1998. Since no process is perfect, better ways to improve quality in the assignment and assessment system have still to be determined. The following areas of improvement can be identified:

- (1) The assignment and self-assessment system requires a more detailed justification to learners. Learners need to be convinced that the assignment and self-assessment system leads to value-added learning. Although an attempt was made to do this, some learners require a more thorough explanation. This problem relates to the perception derived from the traditional school of thought that "teachers do the teaching and marking" (Adams & King 1995:328). At first many learners are unaware that they can be competent assessors of their own work. Due to a lack of experience and uncertainty about their ability, learners may initially have difficulty in accepting this form of assessment. This might entail a paradigm shift for many learners, who in the past regarded themselves as "empty vessels" into whom lecturers merely "poured" the necessary knowledge and skills.
- (2) The learning cycle requires feedback to be successful. The quality of learning, however, can be improved if this takes place as soon as possible. The fact that the memorandum is available in the form of immediate feedback, enforces the notion of a higher level of learning. For the 15.2% of learners who doubt the value of the immediate available memorandum, a clearer explanation of the feedback system is required. Learners need to be convinced that they can and must take responsibility for their own learning (Osterman 1991:214).
- (3) A clear and well-structured memorandum with a detailed marking schedule should be developed to include the diversity of learners and their experiences. Although all activities included a possible answer, practices differ so much that learners may not be able to use the answer as an appropriate example. More criteria in the marking schedule should be developed in question form to assist learners to determine whether the particular activity was successfully completed.
- (4) From the findings it is clear that many learners had difficulty in completing the activities within the time limit. For the majority of these learners

the medium of instruction is a second or third language. It is therefore recommended that learners should be encouraged to form study groups (a strategy merely suggested in their learning material) to help them with the conceptualisation and understanding of the learning material and completion of the activities.

- (5) A system whereby fellow learners mark each other's work or whereby learners indicate a limited number of activities in the assignment of which they are unsure for the attention of the lecturer, may help the few learners who doubt their self-assessment abilities. Since some learners may "ride this system" and thus be made dependent on lecturers once again, they should first mark the activity and leave it for comments by the lecturer. They should be reminded that marking their activities by using the available memorandum enforces learning.
- (6) To help learners plan their learning, future learners will be offered a choice for the submission of a section of the assignment. The assignment will be divided into three sections with subsequent due dates. Learners will have an option of submitting sections of the assignment on these due dates or the whole assignment on another due date later in the year. Learners who feel unsure about their self-assessment abilities can then be "trained" to mark their own assignment.
- (7) Taking the postal delays into consideration, a month will be allowed before "reading" the responses of learners to the questionnaire. This will ensure a much higher response.

## CONCLUSION

Taking control over and accepting the responsibility for one's own learning in a system dominated by an authoritarian, rote-learning approach where the learner is at the mercy of the teacher or the system, can be a daunting experience for any learner. Lewis (1993:3) and Greenwood and Guant (1994:150) who adapted Deming's quality philosophy to education, believe that the aim of education must be to enable and empower learners to take control of their own learning, to empower them to maximise their capabilities and find "joy in learning". Accepting the fact that self-control over learning is a matter of quality, especially if the control includes self-assessment, it becomes imperative for this notion of quality to explore the practical applications of empowering the learner. This article demonstrates how the module Personnel Management has embarked on the quality journey according to the views of learners, a key group of internal customers.

It seems that the assignment and system of self-assessment used in the module has succeeded in empowering the majority of learners to become co-responsible for their own learning. Evidence was given that the assignment and self-assessment system have met the expectations and needs of a very large group of the learners and that learners seem to experience it as a meaningful contribution to a new learning paradigm. The fact that this particular assignment emphasised responsibility for learning and de-emphasised the mark driven performance paradigm, can be seen as a small but extremely important contribution to a new quality learning experience in programmes of this nature.

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