# A Quality Picture: Perspectives on a Distance Learning Programme

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This paper reports part of a study which examines the construct of quality in Massey University's extramural, undergraduate, business studies programme utilising the perceptions of three groups of stakeholders - students, teaching staff and senior managers.

The quest for quality has had a pervasive effect on business activity in the 1980s and 1990s. Boards of directors and managers believe that it gives them a competitive advantage, consumers demand it and employees want it. There is a widely held belief that 'quality does it all. It saves. It sells. It satisfies' (Brown, Gummesson, Edvardson, & Gustavsson, 1991, xiii).

Quality control measures have long existed for tangible goods. Definitions of quality centre on the ability of a product to fulfill its purpose (Juran's 'fitness for use') and to meet predefined specifications (Crosby's 'conformance to specifications'). However, in services, quality is more difficult to define and measure. Although most services incorporate the use of tangible goods, the service itself is basically intangible. 'Services are timebound and experiential, even though they may have lasting consequences' (Lovelock, 1992, 6). Moreover, service is usually dependent on the interaction of at least two individuals - the customer and the service provider, and it is often a lengthy process to which the consumer may make a considerable contribution, an 'input' often impossible to predetermine or define. Gummesson calls this key concept 'interactive production' in which quality contributions come from the concerted efforts of both the customer and the service provider (Gummesson, in Brown et al, 1991, 4). This is true of all services, even those such as education and health which have traditionally not defined the users of their services as customers.

Publically funded institutions, including local bodies, health and education, have not escaped the demand for quality. In New Zealand this has largely been in response to deregulation, increased competition, reduced funding, the drive for efficiency and a greater requirement for accountability from both the government and the public. The result has been massive changes in the structure and culture of many public institutions. In the tertiary education sector deregulation has allowed many new entrants into a market which was previously exclusive to the universities - the teaching and granting of degrees. While the universities have not been at the vanguard of embracing quality management, many worldwide have now established their own quality monitoring bodies. In New Zealand this is the New Zealand Universities Academic Audit Unit.

There has also been a substantial reduction in the level of government subsidy that students receive to support their tertiary study. So as the range of providers and programmes expands and as students are expected to contribute a greater proportion of their own fees, they increasingly view themselves as customers with consumer rights and use

quality as an important determinant of choice.

Quality measures in higher education have traditionally focused very much on outputs and objective performance indicators. In distance education quality assessment has centred on outputs such as good presentation of course materials, integrated use of media, and performance indicators such as retention and pass rates. Until recently little attention was paid to what quality means to the consumers of the service, be they students or prospective employers. While tertiary education providers may have an increasing awareness of stakeholders and the 'customer' in education, there is still a reluctance to take cognisance of their expressed needs and perceptions when deciding and designing quality standards. However, in a market which is becoming ever more competitive, it is crucial that providers understand what quality means to the consumers of the 'product' (distance education being a mix of both goods, such as study guides and computer software, and services) that they offer.

Other important stakeholders in the quality of university distance education courses include the academic staff who design and teach the programmes, the 'experts', and the senior management of the institution who have the overall responsibility for planning and resource allocation.

An important advantage of the stakeholder model is that in taking account of a multiplicity of needs and perceptions, a complex construct such as quality can be illuminated. Our understanding of it is enhanced and this highlights ways that it can be measured and programmes improved. The recognition of the importance of stakeholders and a clear focus on defining and meeting customer needs are central to many models of quality management used in business. A number of these models, including Total Quality Management (TQM), have now been applied to tertiary and distance education (see for example Coate,1990; Lewis and Smith,

1994; McIlroy and Walker, 1993, 1996). There are also some studies of quality in higher education which have included student and staff perceptions (for example Harvey, Burrows and Green, 1992).

THE STUDY The aims of the study were to:
• identify the major dimensions of quality as perceived by students, teaching staff and senior managers
• examine any gaps in perceptions among the three groups
• reach conclusions about how to improve quality in the extramural, undergraduate, business studies programme

In order to do this and to increase the validity and reliability of the study, triangulation of methods and data was used. Focus groups were conducted with groups of students and staff, individual interviews were conducted with senior managers and a questionnaire was sent to a large sample of students and staff. From the qualitative data gathered in the focus groups and interviews, seven dimensions of quality were distilled. These became the phenomenological scales upon which the questionnaire was designed and are:

Scale A:  Course structure and content
Scale B:  Face-to-face contact
Scale C:  Assessment
Scale D:  Communication
Scale E:  Institutional and environmental influences
Scale F:  Standards and evaluation
Scale G:  Programme integrity

The notion of service quality having multiple dimensions is well documented (see, for example, Sasser, Olsen & Wyckoff, 1978; Garvin, 1988; Gronroos, 1990). One of the most widely applied multi-dimensional models of service quality is that proposed by Parasuraman, Zeithaml and Berry (1985, 1990). However, previous research on quality in tertiary and distance education (for example Bell and Shieff, 1990; Athiyaman and O'Donnell, 1994) found that Parasuraman *et*

al's generic SERVQUAL instrument was not specifically suited for assessing service quality in higher education.

The questionnaire developed from the seven phenomenological scales contained 114 items all of which were quantitative. It was administered in the between semester break in 1996, after students had completed their Semester 1 examinations. A random sample of students from the extramural, undergraduate, business studies roll (n=584) and the total population of teaching staff in the Business Studies Faculty (n=145) were surveyed which resulted in a response rate of 54 percent for students and 47 percent for staff.

## RESULTS AND DISCUSSION Basic

statistical analysis of the data indicated that there were a number of differences between staff and student responses. It had been postulated during the focus group stage that there would also be differences between the perceptions of 'low experience' students, defined as those who had passed five or fewer extramural papers, and 'high experience' students, defined as those who had passed ten

or more extramural papers. The next stage of analysis was therefore to examine the level of statistical difference between the responses of the three groups on all questions. The Mann-Whitney $U$ Test was used for this purpose and was applied to the following four groups:

- staff and the total sample of students
- staff and low experience students
- staff and high experience students
- low and high experience students

The greatest number of significant differences were between staff and the total number of students. Surprisingly, there were very few significant differences between high and low experience students, and only two that were highly significant ($p<.01$ level).

As would be expected, the pattern of results, including significant differences, for staff and low experience students and staff and high experience students reflected the pattern for staff and all students.

Because of the large number of results, the discussion that follows will focus on two

| Item | |
|---|---|
| 12 | Aims, objectives and learning outcomes for all courses should be clearly stated |
| 22 | Course materials should be easy to use |
| 36 | All course texts should be available for the start of the course |
| 39 | All course materials should be clearly and simply written and jargon kept to a minimum |
| 50 | The information in course materials should be accurate and error free |
| 53 | A range of readings that complement the set text should be included with the course |
| 54 | The quality of courses is compromised if the quantity of readings is excessive |
| 72 | Course materials should be presented in such a way that they are durable and robust |
| 87 | Course materials should be up-to-date/current |
| 94 | Lecturers should anticipate areas of learning where students commonly have difficulty and try to find ways to overcome them |

Table 1: High Agreement, No Significant Differences Staff and all Students,
Scale A : Course Structure and Content

scales: *course structure and content* and *face-to-face contact*. Items showing significant differences are grouped into those where the results were congruent i.e. both groups either agreed or disagreed, and those where the results were incongruent that is, one group agreed and the other disagreed.

*Scale A: Course Structure and Content*
There were 22 items on this scale which related to how courses were structured and organised and to issues of content. Some items looked at support/administrative issues such as the extramural library service; others asked about issues of course structure such as format and organisation of the material; and others asked about issues relating to content such as relevance, and currency of material.

There were 10 items where there was high agreement between staff and students and there were no significant differences, see Table 1. These items relate to the structure, accuracy, currency and usability of course materials, the

availability of texts and the quantity of additional readings. They also represent what could be described as aspects of 'good practice' in distance education courses and the results confirm that both students and staff concur with them. It is important that the institution ensures that they are built into the design of its courses. This is particularly so in a market that is becoming increasingly competitive with new providers entering the field from both New Zealand and overseas. As recent research by Wood (1996) found, customer expectations are also continuing to rise and identifying best practice and transferring it throughout the organisation is a useful and effective strategy for improving service quality.

There were 12 items where there were significant differences between students and staff opinion, see Table 2.

*Items Showing Congruence*
Three items, 60, 63 and 97, refer to the need

| Item | | Level of Sig |
|---|---|---|
| 4 | The extramural library service is excellent | .029* |
| 8 | Should be standard format for all courses | .000** |
| 18 | Course content should reflect learning outcomes | .023* |
| 28 | Courses should develop critical thinking abilities | .000** |
| 60 | Course materials should consistently refer to the text | .025* |
| 63 | Relative importance of all course reading should be indicated | .000** |
| 64 | University courses should be knowledge based rather than skills based | .000** |
| 68 | No justification for purchase of multiple texts for a course | .000** |
| 74 | Courses should be practical and relevant to the business world | .000** |
| 84 | Texts should be written about or highly relevant to NZ | .002** |
| 92 | Courses should be based on contemporary international literature and knowledge | .028* |
| 97 | A weekly timetable should be included in all courses to guide students | .000** |

** significant at the p<.01 level

* significant at the p<.05 level

**Table 2: Significant Differences Staff and all Students, Scale A: Course Structure and Content**

for learning to be structured. This includes clear guidance from the course controller about what should be read and when. On all three items the level of student agreement was stronger than for staff. Item 60 was also the only item on this scale where there was a significant difference (p<.05 level) between low and high experience students, low experience students agreeing with the item more strongly than their more experienced contemporaries. This could indicate that they prefer even more direction and structure in their learning. There was also extremely high agreement from both the staff and all student groups that course content should reflect learning outcomes, a further indication of the need for structure in the learning process. For this item staff agreed more strongly than students. Many courses already incorporate these design features and for those that do not, it would be a relatively easy matter for these features to be included.

However, the need for structure does not encompass standardising course formats. Neither staff nor students felt that there should be a standard format for all courses (item 8) with staff disagreement being stronger. The strength of staff opinion may reflect the idiosyncratic approach to course design that is part of Massey University's culture. This it seems is more desirable than a template approach which, it could be argued, makes course design much easier. Many of the open universities, including the UK Open University, use a standard format for their courses. While it may make courses more accessible for users, it also has a very important 'branding' function. In a market which is becoming more and more competitive, such a consideration may become quite an important issue.

Although both staff and students agreed that there was no justification for the purchase of multiple texts (item 68), student opinion was much stronger, resulting in a highly significant difference between the two groups (p<.01). This outcome is not unexpected, given that students have to 'foot the bill' for their texts

and they are generally concerned about the rising costs of study. It may also be related to student concerns about excessive workload.

Both staff and student groups agreed that the extramural library service is excellent but the level of agreement was stronger from students (item 4). However, it should also be noted that 21 students (7percent) and 6 staff (9percent) commented on their questionnaires that they either had never used the extramural library service or lacked the knowledge necessary to respond to the question. But it is obviously a service which is highly valued by those who do use it.

While all staff and a high proportion of students agreed that courses should develop students' critical thinking abilities, staff felt more strongly about this than students did. This same difference of opinion was reflected in the responses to item 74 where students agreed more strongly than staff that courses should be practical and relevant to the business world.

Items 84 and 92 relate to the content of course texts. Students felt more strongly than staff that course texts should be written about or highly relevant to New Zealand. This suggests that students want texts that reflect and can be applied to their working environments. Staff responses may reflect the common difficulty of finding suitable texts about New Zealand and the desire to place New Zealand within the wider international context with which they often strongly identify, a notion supported by their strong agreement with item 92.

*Items Showing Incongruence*
There was only one item on this scale that showed significant differences and incongruence between the two groups. Item 64 stated that university courses should be knowledge based rather than skills based. Slightly more than half of staff, 58percent, agreed with this statement. However, quite a high proportion of students, 65percent, disagreed with the statement. While students

are indicating fairly clearly that they prefer courses that are based on skills development,

it is interesting that staff, traditionally fairly 'academic' in their orientation to learning, are rather equivocal in their responses. This may reflect the applied nature of business studies and it could well be that staff in a more traditional faculty, such as humanities, would respond differently. However, it does suggest that staff and students may well have different expectations about the purpose of courses offered by the Faculty of Business Studies and that such a gap may need to be addressed through appropriate marketing.

As a means of cross validating and summarising the concepts in the questionnaire, an item (118) was included at the end which asked participants to rate 12 dimensions of quality in business studies extramural courses according to their importance. There were four that related to this scale. For 'course design' and 'course content' both student and staff respondents agreed that these were extremely important. However, on 'relevance to the work situation', there was a highly significant difference (p<.01) with students seeing this as more important than staff. The same difference was found with 'intellectual challenge' but this time staff saw this as more important than students. These results confirm the findings on Scale A.

This scale, *course structure and content*, has highlighted three things:

1. There was a high level of agreement between students and staff about a number of course attributes that could be said to represent good practice. These include physical, structural and content aspects of course materials.

2. It is clear that students value a high level of structure and guidance in their learning and appreciate techniques such as keying texts to the study guide that will facilitate the learning process.

3. Students felt more strongly than staff that courses should be practical, relevant to the business world and based on texts that are about or highly relevant to New Zealand. They also felt that courses should be skills based rather than knowledge based reflecting the fact that many of them are doing work-related study. Staff on the other hand, placed a higher value on the intellectual challenge of courses than students did.

*Scale B: Face-to-Face Contact*
At Massey University, most courses taught in the distance mode, offer some opportunity for face-to-face contact between students and the course tutor. This is either at the Palmerston North campus (campus course) or at a regional venue (regional course) when course numbers warrant it. Depending on course requirements, attendance may be voluntary, strongly recommended or compulsory. This scale, *face-to-face contact*, had 10 items relating to the value of campus and regional courses. Although there were only three items where the differences between the two groups were significant, the results from the other 7 items also produced some interesting information.

| Item | | Level of Sig |
|------|---|---|
| 23 | Face-to-face contact with lecturer enhances overall quality of course | .037* |
| 43 | Weekend regional courses are of more value than on campus courses | .000** |
| 108 | The costs of attending an on campus course far outweigh the benefits | .000** |

** significant at the p<.01 level
* significant at the p<.05 level

**Table 3: Significant Differences Staff and all Students, Scale B, Face-to-Face Contact**

There were no items on this scale where there were significant differences between high and low experience students.

### Items Showing Congruence
Both students and staff supported the contention that face-to-face contact with the lecturer enhances the overall quality of a course (item 23) but staff agreement was stronger. However, item 108 stated that the costs of attending a campus course far outweigh the benefits and produced significantly different results for students and staff at the $p<.01$ level. 86 percent of staff but a much lower 58 percent of students disagreed with the statement. While staff may base their responses on pedagogical concerns, student opinion may be mediated by other factors such as the considerable costs of accessing face-to-face contact as well as the perceived value to them. This is supported by comments made by 11 students on their questionnaires to elucidate their response, for example *"depends on the lecturer"; "the personal cost of losing work to attend these courses is prohibitive"; "includes time off work"; "sometimes yes, sometimes no"*.

### Items Showing Incongruence
Item 43, weekend regional courses are of more value than campus courses, produced a result that was both incongruent and highly significant. 60 percent of students agreed with this statement while 64 percent of staff disagreed. The cost factor again probably influenced student opinions. This is supported by a number of comments added by students to questionnaires for example *"less cost for the South Island";" only because of accessibility"; "easier to attend"*. It is interesting to compare the results of this item, which looks at value to students, with item 26 which stated that students prefer to attend regional courses than campus courses. Students both value regional courses more and prefer them. On the other hand, staff attribute considerably less value to regional courses but agree that students prefer them. This probably reflects staffs' own preference for campus courses which do not involve them in travelling away from home and teaching in strange venues.

item 26 (above), did not yield significantly different results but nevertheless they were interesting. For example, in response to the statement that mixing with students at campus courses is more valuable than meeting lecturers, 61 percent students disagreed but 51 percent staff agreed. This finding suggests that the value that students place on networking with fellow students is not as important as staff think it is.

Both students and staff disagreed that campus courses were of more value at 300 level than 100 and 200 level suggesting that both student and staff groups also value campus courses at the 100 and 200 level.

A higher percentage of staff (71 percent) than students (59 percent) agreed with the statement that often it is only at the campus course that the course is put in perspective which is another indication that staff value campus courses more highly than students.

There was high agreement from students and staff that a variety of teaching techniques add value to the learning experience at campus and regional courses and that being able to use the library and access additional resources was an important aspect of campus courses.

Finally, the results to the statement that there is no necessity for compulsory campus courses were equivocal for both students and staff. 55 percent students and 50 percent staff agreed.

In response to items on this scale, there were a number of comments made by students on their questionnaires indicating that they had never attended either a regional or a campus course. They therefore felt unqualified to respond. There could be a significant number of students who seldom or never attend a campus or regional course during their time as an extramural student. Furthermore, with over 40 percent of students indicating that the costs of attending a campus course do outweigh the benefits this could well be an issue that the university has to seriously reconsider particularly in the light of ever

increasing and accessible technology options. It is interesting to note that anecdotal evidence suggests that attendance at both regional and campus courses is declining.

As would be expected from the results on this scale, on the 'face-to-face' dimension in summary item 118, there was a highly significant difference ($p < .01$). Staff rated this dimension as very much more important than students did.

SUMMARY The results of the survey have identified areas of congruence and incongruence in student and staff perceptions of quality on the two scales: *course content and structure* and *face-to face contact*. Many of the items where agreement and congruence were high represent aspects of good practice and are already incorporated into many courses. However, the perceived need for structure on the part of students is an area where the faculty may need to put more effort.

In order to improve student perceptions of quality, areas of incongruence or the 'gaps' in perception need to be addressed. There are a number of areas where this could be done without compromising the integrity or overall standards of courses. The 'necessity' for face-to-face contact may well be a case in point. This year, Massey University's College of Education is offering New Zealand's first fully external education degree. There is no face-to-face component but there is extensive use of email. Student response to this so far has been extremely positive.

The other scales representing dimensions of quality sampled in this survey have also produced interesting results and highlight areas where the faculty could direct effort in order to continuously improve the quality of its extramural programme.

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