

Measuring aspects of student satisfaction with course provision

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Abstract

As students increasingly fund themselves, the notion of the student as a customer of Higher Education, expecting quality services from the provider, becomes more prevalent. The student experience has become an important dimension of the quality of education.

Evaluating the student experience (as distinct from the content or delivery of their course) becomes a pressing need in order to maintain and improve educational quality in a competitive market. Developing appropriate and sensitive evaluation instruments is therefore a priority for quality management and enhancement.

Other service providers (e.g. commercial services) have faced this challenge for some time and an examination of methods used elsewhere produces interesting alternatives to more conventional questionnaire approaches.

We have developed a variant of the so-called "service Template" for evaluating student satisfaction with postgraduate distance learning courses (a sector in which discerning students invariably pay all their fees themselves). We have designed and produced a prototype Template which is delivered electronically to postgraduate students learning at a distance from the university.

Our experience with this instrument leads us to believe that it provides valuable insights into how aspects of the student experience might be changed to generate a greater fit between what students look for in a course of study and what they receive.

We are currently embarking on extending the Template idea to other levels of study and modes of delivery in order to gauge more generally the level of student satisfaction with their courses.

1. Introduction

Students of Higher Education increasingly perceive themselves to be customers of a service. This is partly as a result of the funding arrangements in the UK where students (or their parents) contribute directly to the cost of the education, and partly because of the growth of consumerism in public services and the desire for individuals to receive value for their time and effort. In postgraduate education, where students (or their employers) have made a substantial contribution to the cost of their study, students have taken a customer role for some time (Long, Tricker, Rangelcroft & Gilroy (1999)).

Key aspects of educational quality, such as academic standards, curriculum content, and the suitability of teaching and learning methods, have always been the subject of much debate. Considerable effort and cost is invested in the monitoring of this

provision to enhance these aspects (Underwood, 2000). However, other aspects of the student experience such as the availability of resources (library, catering), the nature of feedback, what is included in the fee, the frequency of tutorials, etc, become increasingly important to this student-as-consumer body and hence are becoming the subject of greater scrutiny and judgement. Students make choices on the basis of their satisfaction with these aspects.

In a competitive market situation, where quality is an important distinguishing feature, institutions are keen to maintain and improve the quality of their provision in order to attract and retain students. Knowing which features of the provision are most in need of attention therefore becomes critical as does possessing an appropriate and sensitive evaluation instrument is a priority for quality management and enhancement.

Traditionally the formal student evaluation mechanism has been a questionnaire issued at the end of the course (or module). Often such questionnaires are designed to include aspects of provision that are determined by the teaching staff and may not reflect what students consider important. Students' service needs can therefore easily be ignored.

Informal evaluation is possible when regular contact is maintained through classes and immediate action can be taken if problems arise. Where students are learning at a distance, this mechanism has limited effectiveness. Our quest was to find an appropriate way of allowing students to evaluate postgraduate distance learning courses against *their own criteria* to reveal any gaps that exist between what they expect and what they receive.

We looked to the evaluation of service quality in the wider area of public and commercial services and based our ideas on the "service Template" (Staughton & Williams, 1994). This measures the degree of fit between what consumers are looking for in service with what they experience.

The Template covers a number of aspects of service, one of which might be, for example, the nature of the teaching approach. For each aspect, respondents express their opinion on what they *look for* in their course and, separately, what they *experience* on their course in respect of each aspect. They do this by selecting the position on a scale between two extreme end points which best describes their opinion. The end points for the aspect relating to teaching approach might be "a theoretical approach" at one end of the scale and "a practical approach" at the other end. These positions are calibrated and are converted in to a measure of the so called "satisfaction gap" for this aspect of service provision. These measures represents the mismatch between what is *looked for* and what is *experienced*.

We have designed and tested a prototype Template for postgraduate Distance Learning courses where the aspects of service provision were largely determined by students themselves. Our Template produces a graphical picture of the size of these satisfaction gaps for these key aspects. In this paper, we report on the development process and the initial results from the prototype Template.

2 Development of Template

What follows is a brief summary of the development of the 'Template'. More detail can be found in our earlier papers (Tricker 1997, Gilroy 1999, Rangecroft 1999, Long 1999, Long 2000, Tricker 2001 and Gilroy 2001).

At the forefront of our minds when we initiated this project was the fact that we were treating students as customers and hence it was their concerns that we needed to address rather than our own. The Template is designed to assess students' views on the issues that they consider important. Like most teachers we were confident that we knew our students and hence had a fair idea of their priorities, but we wished to be certain that we were correct in these assumptions. We therefore carried out a preliminary study to identify the issues that our distance learners considered important. A questionnaire was sent out to students on a number of distance learning courses to identify these issues and the results analysed to give a list of issues that were then grouped under headings. The results justified our decision to allow students to voice their opinions, as the list was not the same as the one we would have written, although there was some commonality. We then studied the list carefully and from it designed the Template so that it covered those aspects of the course that were most important to the students themselves.

Unlike most data collection tools the Template, like its counterpart in the service sector, does not make any judgements about what is 'good' or 'bad' but simply attempts to provide 'value free' alternatives. The design of these 'endpoints' was quite taxing but we felt that it was vital to design these carefully to ensure that the Template would give us valid information. The Template then went through several drafts, each of which was piloted, before the final version was decided upon. The end product was a paper version of the Template containing the sets of endpoints in random order, presented twice to allow students to identify both what they looked for from the course and what they were actually experiencing. We were concerned that the order in which these two versions were completed might influence the outcome, but an experiment to investigate this showed no order effect.

The final version of the Template has been used to evaluate the satisfaction levels of students on a number of distance learning courses and data has been collected and analysed to find the areas of both satisfaction and dissatisfaction. The analysis has concentrated on measuring the 'gap' between expectation and experience both in terms of its size and direction. Both statistics and graphs have been used to present the findings. Choosing the appropriate statistics and graphs has been carefully thought out after consideration of the alternatives. Our criteria were that the statistics should be statistically sound and easy to understand, and that the graphs should be a true and clear representation of the data. We did develop some quite sophisticated graphs (Long et al, 2000) but when we gave them to course leaders to interpret we found that in some cases they were too complex. Since clear communication of findings was critical we eventually decided to use very simple graphs such as bar charts, though the more complex graphics are available for course leaders who wish to study them.

Having collected data from several distance learning courses and analysed the resulting data, we presented the findings to the respective course leaders to gauge their reactions and hence evaluate the usefulness of the Template. All the course leaders we interviewed were very positive about the value of the results. There were some instances where the gaps identified were unexpected and gave them much food for thought. In some cases the course leader decided to investigate the issue in more detail, in others immediate remedial action was taken. This action took two forms; changing the course to meet students concerns or communicating more effectively to manage student expectation. It is fair to say that at the beginning of this project the expectation of members of the team had been that the information gathered would lead to the design of a 'better' course by leading to changes in content and/or delivery. In the event this was rarely the outcome because in most

cases student expectations were impossible to meet for sound practical reasons. What did emerge was the need to communicate more effectively and openly with students about what can and cannot be done to alter complex course provision. Only time and the repeated use of the Template will show whether these strategies have been successful in improving the student experience.

All the course leaders we interviewed were convinced that at least some of the information that came from the application of the Template had not been highlighted using more conventional student feedback mechanisms. Whilst not a replacement for the usual questionnaires and interviews we feel that using the Template is a rich source of feedback which would otherwise be untapped.

3. Electronic Version

When piloting the paper version of the Template two major issues arose. The first was that the fact that it had to be sent to students to complete and then had to be returned by them. The second was that the data generated by the Template had to be entered manually into the database before analysis of the results. An obvious next stage was to develop an electronic version of the Template in order to avoid both of these problems.

Our ultimate aim was to produce an Internet version of the Template but as an interim step we produced a CD version. In the first instance there seemed to be two compelling reasons for providing a CD version rather than a web based version:

- Not all students have easy access to the Internet and a CD version would allow us to pilot the electronic version to a wider audience of students.
- A CD does not require any plug-ins to operate and therefore removing the need to download these before running the Template. Our experience has shown that many of the students are only connected to the Internet from home. As a result this form of connection is often slow to operate and it would be very time consuming to download the plug-in software. This can be especially important if they are actually paying for the connection.

The CD version of the Template was commissioned and sent to a range of postgraduate students on three distance education courses. They were asked to run the CD, enter their responses, and if possible send them via the Internet using the instructions on the CD itself. A system which allowed the results to be sent to a database was an important feature of the electronic version. It removed the need for manual entry of the data and also would facilitate the aim of providing the students, on completion of their data entry, to receive feedback on how their responses compared with those of other students.

To provide a feel of the general appearance of the QUEST (QUality Evaluation by Student Template) software, some screen shots are given in figure 1.

Students were asked to complete an evaluation sheet to provide us with feedback on the design and ease of using the CD version of the Template. This feedback from students has been very informative in helping to clarify how to develop the software for the Internet version of the Template. The following selection of responses from students provides a flavour of the feedback obtained.

The general appearance of software

"Fine – clear – easy to use"

"Looks good - up to date"

"Interface quite nice but bad start because course codes not defined"

"Pleasant enough, though it would be better if it were to be full screen"

"Clear – colourful, not fussy, pleasant appearance"

"Choice of questions put side by side rather than at an angle, with all the buttons located together so you are not constantly moving the mouse"

The ease of use of the software

"Very user friendly – I was impressed"

"No problems"

"Straight forward very easy to use"

"I was a little confused at first about leaving the marker unmoved. It seemed easy to use"

Were there sufficient instructions how to input responses?

"Probably too many – could be reduced, but fine really"

"Yes – made entering the responses easy"

"Yes – except for entering course codes"

"Yes - would prefer tick boxes as opposed to the slider method"

How long did it take you to complete the Template?

In general the time to complete data entry was about 10 minutes and about one minute to transmit the data

What version of the Template would you prefer: CD, Internet or paper?

As expected more students were in favour of the Internet version, with 60% preferring this compared with 30% for the CD version and 10% for the paper version. However, as these figures show, some do prefer the CD version for the following reason.

"I like the idea of using the CD and then sending the data via the net. I would imagine an on line version would worry some people - i.e. downloading software etc"

We are now in the final stages of development of an Internet version of the Template. By moving to this version we have removed problems found while piloting the CD version. These difficulties included factors such as the trouble and the cost of posting out the CDs, and students finding it off-putting to have to load the CD prior to completing the Template. The internet version has incorporated changes to take account of the points raised by students in their feedback from the CD version. (e.g. The course codes have now been redefined and the appropriate code can now be chosen from a drop down menu.) The revised Template will be full screen and the questions put side by side rather than at an angle. We are still wrestling with the best way to provide relevant feedback, based on the results from QUEST, in an interactive way with students.

4. The future

Our experience with the Template leads us to believe that it provides a valuable approach to evaluation. It offers practical insights into how a greater fit between what students *look for* in a course of study and what they *experience* can be achieved either by changing aspects of the student experience or the way in which expectations are generated.

If the need to determine the demands on the nature of the educational experience increases, we believe that the value of a Template approach to evaluation can be extended to other forms of delivery and to other levels within education. Take the growth in e-learning as an example; the development of e-learning packages raises issues about course design and delivery to meet the students' expectations. There is still much to be done in evaluating these delivery modes and ensuring that a good fit is achieved.

Undergraduate education in the UK is changing as wider access brings greater numbers of more diverse students. Informing and meeting their expectations will become an increasing challenge within a climate of reducing resources. The Template approach has the potential to provide insights into how this might be achieved.

5. References

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