



## **Use of Questionmark Perception at the University of Bradford – Baseline Study.**

Questionmark was first purchased at the University of Bradford in July 2003, but was little used in the first year. In fact, during the academic year 2003-4, when version three was being used, only 1 questionnaire and one assessment were delivered. The questionnaire was delivered by a Learning Technologist, and the one assessment was used with very modest numbers by a lecturer in Electronic Imaging and Media Communications (EIMC).

The following academic year, 2004-5, saw an increase in the use of Qmark version three, with 6 surveys and 14 assessments being used. The 2004-5 surveys were used primarily by Central Services, Learning Support Services and the School of Management, and the assessments were used by the Department of Cybernetics, EIMC, Electronics & Telecommunications as well as the School of Management.

In 2005-6 there was a marked increase in the use of questionnaires, but again these were restricted to use by Central Services, Learning Support Services and the School of Management, although there was a wider range of users within these areas. Perhaps surprisingly, there was little growth in the number of assessment submissions on the previous year – there were many more assessments (32) than the previous year, just mostly on a smaller scale. There was still a focus on the Schools of Informatics (Cybernetics, EIMC) and Management, but new users appeared in other areas – Schools of Health, EDT and, notably the School of Archaeological, Geographical and Environmental Sciences. An online assessment module was also delivered to staff using QMP version 3, which also accounted for a number of new users from a range of academic disciplines.

The use of QMP really took off in academic year 2006-7, especially for assessments. The number of surveys more than trebled, again coming largely from the centre, and the Schools of Management and Health. The number of assessments rose dramatically: the number of assessments more than doubled, but the number of submissions rose by more than 12.5 times. So, clearly there were a lot more assessments, and on a much larger scale. As before, the majority of the assessments were taking place in Cybernetics, EIMC, Health and Management, Archaeology. For the first time, it began to be used on a large scale in Computing and Law. Also, it was noted that whilst the original innovator users had become power users on a grand scale, more and more people were coming to QMP, and a number of users had developed at an impressive rate.

It was no coincidence that the massive expansion of use of QMP at UoB took place in the year when we moved from QMP version 3 to version 4.3. It is certain that a number of users had been waiting for version 4 to become available, and had come on board as soon as version 4 was released. For a large part of 2006-7, versions 3 and 4 operated alongside one another, and training and support was offered to make sure that the transition between versions was as painless as possible. For 2007-8, version 3 will no longer be supported, and users will be obliged to use the most up-to-date version.

The following graphs indicate in visual form the development that has taken place in the use of QMP in the last few years, along with a brief discussion of the implications of what these figures suggest.

### Use of QMP for online Questionnaires

- 2003-4 : 1 questionnaire (46 responses) V3
- 2004-5 : 6 questionnaires (618 responses) V3
- 2005-6: 11 questionnaires (1151 responses) V3
- 2006-7 : 36 questionnaires (2717 responses)\*<sup>1</sup> V3 & V4

\*<sup>1</sup>: total figure made up of 16 questionnaires (1346 responses) in Version 3 + 20 questionnaires (1371 responses) in Version 4

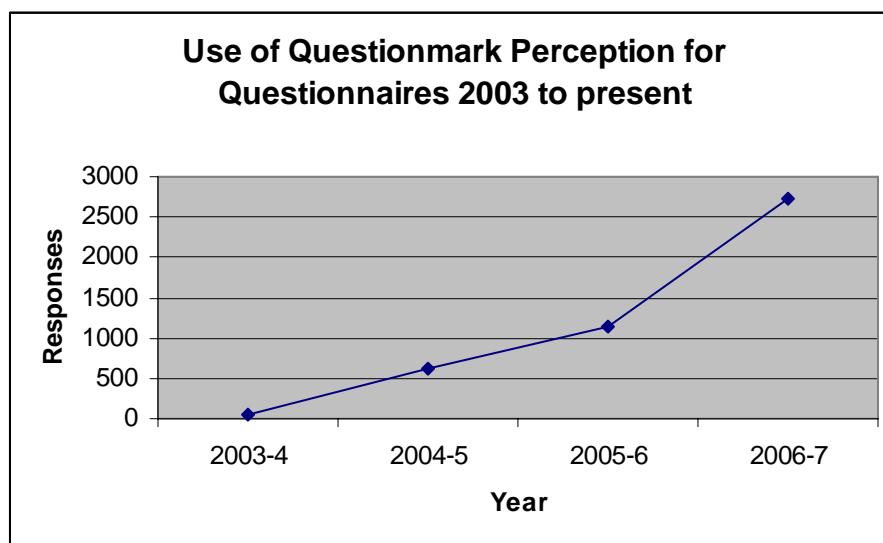


Fig 1: Number of questionnaire responses per academic year

This table and the one below demonstrate the rise in the number of surveys, from very little use in 2003-4 to 36 questionnaires (with more than 2.5 K responses) in 2006-7. To date, it has been possible to support the creation, administration, delivery and reporting on these surveys on an ad hoc one-by-one basis with the individuals concerned. However, if the rate of use were to increase at the same rate, it would certainly be necessary to devolve some of the administrative burden to instructors, research assistants and administrators.

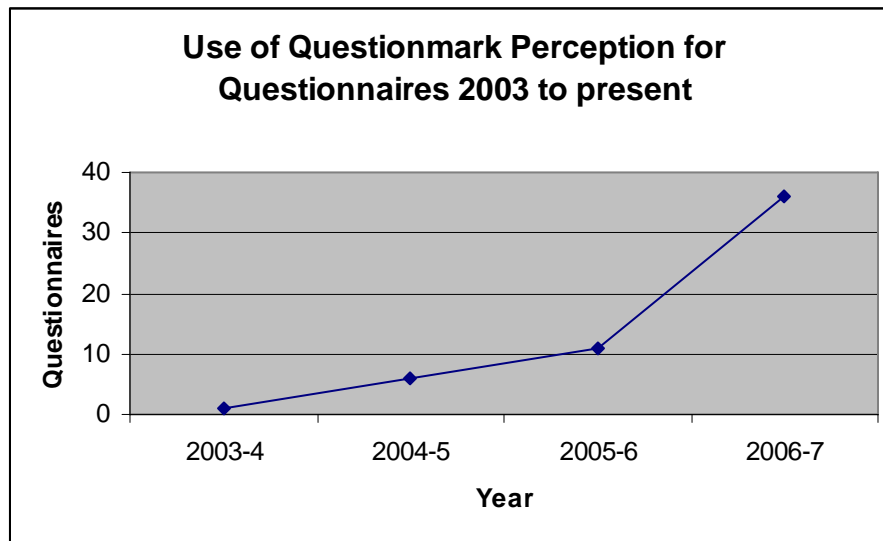


Fig 2: Number of questionnaires delivered online per academic year

### Use of QMP for online assessments

2003-4: 1 assessment = 7 submissions V3  
 2004-5: 14 assessments = 1094 submissions V3  
 2005-6: 32 assessments = 1101 submissions V3  
 2006-7: 75 assessments = 13697\*<sup>2</sup> V3 & V4

\*<sup>2</sup> : total figure made up of 21 assessments (3609 submissions) in Version 3 + 54 assessments (10088 submissions) in Version 4

The graphs below show the gradual increase in the use of assessments up to 2005-6, with a marked increase in 2006-7. It is very clear from this that the pioneers and early adopters are now on board, and we are now looking to reach out to the bulk of instructors. This only goes to underline how timely the Pathfinder project is for Computer Assisted Assessment at the University of Bradford. It is now vital to have quality support in place, along with a dedicated training programme for CAA, along with practices and procedures that staff must follow. We are no longer looking at a situation where a learning technologist can spare a few hours here and there to deal with a handful of instructors using CAA alongside other (perhaps more pressing) matters such as administering the VLE. We now need dedicated learning technologists and technicians to support this area and take it forward in future. It is vital that the institution management buys into this and supports the move forward through the e-strategy.

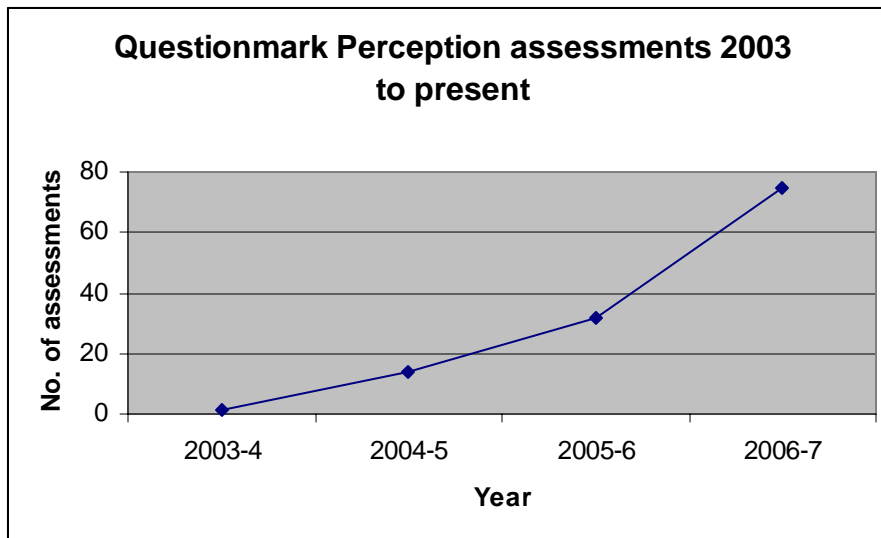


Fig 3: Number of assessments delivered online per academic year

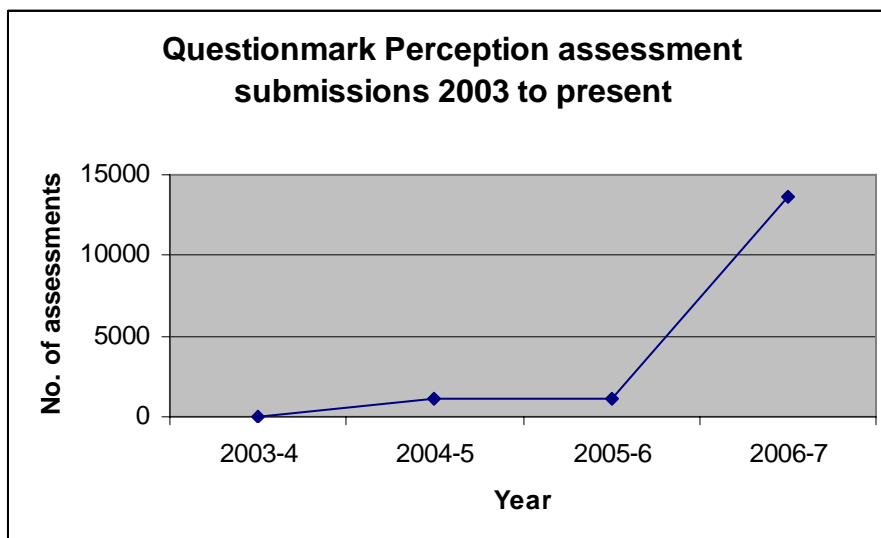


Fig 4: Number of assessment submissions per academic year

It should also be pointed out that it is important that the range of users of CAA should be developed across the full range of schools and departments in the institution. Whilst many of the pioneers and early adopters came from the areas of Informatics, EDT, Management and Health, there is great scope for development into Life Sciences, where there has been little or no use of CAA to date. Moreover, the University Examinations office has indicated clearly that there are a large number of paper-based multiple choice exams being run out of the School of Life Sciences, which is a considerable waste of resources (human and paper) when this could so easily be computerised. It has been noted by academics within the School of Life Sciences that we need to do some work to convince them of the security, reliability of CAA, but this can certainly be looked at as part of the Pathfinder project. It ought also to be pointed out that the department of Pharmacy in the School of Life Sciences is (one of) the largest departments at the University and they currently run many paper-based MCQ exams.

As is shown in table 1 and in figure 5 below, which are based on numbers of assessments (rather than numbers of submissions), the use of QMP for assessment is not evenly distributed across the departments and schools, with a lot of use in the School of Informatics (Computing, Cybernetics and EIMC = 70.67% of total use), School of Management (Management and Law = 20% of total) and little use in School of Health (4%), SSIS (1.33%), Life Sciences (4%). Interestingly, in 2006-7 there was no use in the School of Engineering Design and Technology, although there had been a little use in 2005-6.

Archaeology	2.67
Computing	50.67
Cybernetics	17.33
EIMC	2.67
Health Care Studies	4.00
BCID	1.33
Law	5.33
Management	14.67
Optometry	1.33

Table 1: Percentage distribution of assessments by department for 2006-7

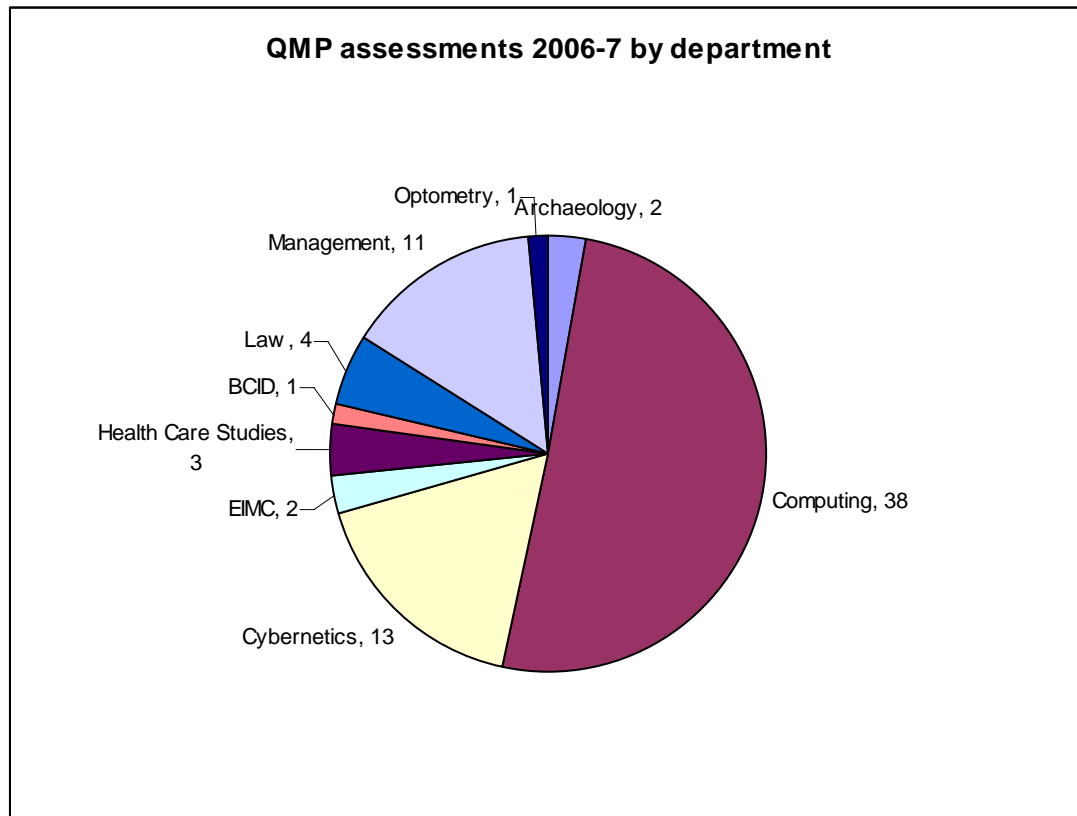


Fig 5: Distribution of assessments by department for academic year 2006-7

What emerges from this is that uptake is clearly progressing well in the area of Informatics, as one might expect, and in the School of Management, who have long

been pioneers in various aspects on e-learning at the university. We will continue to support these schools and expect to see future growth there as new users come on board after seeing the successes of their colleagues with CAA. However, it is also clear that other subject areas have yet to take off – as was mentioned above, the school of Life Sciences are a clear target for support, and EDT can be approached to establish what their needs are. Equally, the School of Health and SSIS might be using QMP more, but we are reluctant to set target quotas for CAA use, as different subject areas will clearly have different needs and will lend themselves more or less to CAA.

## The School of Life Sciences

Data provided by the Exams Office in ASSU supports the idea that the School of Life Sciences should be targeted for additional support to promote the use of CAA.

	Jan-07	May-07	Aug-07	<b>TOTAL 06-07</b>
<b>Biomedical Sciences</b>	1335	1392	335	<b>3062</b>
<b>Clinical Sciences</b>	113	297	37	<b>447</b>
<b>Chemical and Forensic Sciences</b>	137	64	37	<b>238</b>
<b>Optometry</b>	658	899	145	<b>1702</b>
<b>Pharmacy</b>	1621	1369	354	<b>3344</b>

Table 2. Numbers of paper-based MCQ exams in School of Life Sciences in academic year 2006-7.

As table 2 shows, in the last academic year, ASSU administered 8793 paper-based multiple choice exams for the School of Life Sciences. These were delivered with answer booklets and optically marked answer sheets. If only a fraction of these were transferred to QMP, there would be a significant saving in terms of paper used and time spent by admin staff at the Exams office.