

12 Methodology: Reflections

Intentions

The first intention of this study was to determine the levels of computer ownership in school, track the changes over time, compare these levels with those of teachers, and to examine the uses that were being made of the computers themselves.

The second intention was to examine the ways in which the use of a new tool changed the ways in which the users operated.

The third intention was to examine whether the use of this new tool would change the way in which the users thought.

Presenting the data

I concluded that the most effective way to present information about levels of ownership was to convert the data into percentages. What was required was a picture of the levels within each tutor group and year group, and the school as a whole. The figures for tutor groups within a year proved invaluable for curricular analysis. It was possible to identify tutor groups with a lower level of computer use within school, and to examine the reasons for that. In many cases it was possible to compensate by reorganizing the timetable to provide ICT literate teachers, or make additional IT facilities available. Tutor groups that showed a lower level of home access than others were provided with additional basic skills as part of the tutorial programme.

To this end, then, the conversion of data that was used proved effective in providing snapshots of ownership. This picture was transferred to other parts of the curriculum and used as a management tool by team leaders.

Reliability

The reliability of this as a presentation technique was dependant upon the collection being systematic. Collections took place within one week in each year, during the spring term. Some data sets were collected outside this period: staff absence, problems with school buses and unforeseen occurrences all played their part in disturbing the schedule. In the main, however, the surveys were completed by the majority of students who were in tutor time on the morning their group was surveyed. The average was 70% of the school population of 1800 for the five-year period during which data was collected.

The process proved less reliable when the same survey was carried out at City Comprehensive School. Class sets were less than complete; responses from students were less detailed. The biggest limitation, however, was that the data collection took place in December. A number of students commented that they expected to receive a PC for Christmas. Had the survey taken place in February the ownership levels may well have been higher.

External factors

The factor that may have made the biggest difference did not form part of the survey: parental occupation. The type of work, and the environment in which it is carried out, is of possibly more significance than the level of pay. The transfer of information technology from the workplace to the home has already been commented on. During 1995-7 the factor that had the biggest impact on access to computers was the purchase of old machines from work (for a nominal sum) for use at home. It was these Windows-based PCs that steered the shift from games machine to work machines for many students.

By 1997 multimedia computers had become consumer goods. Prices were quoted inclusive of Value Added Tax. They were sold as packages, with printers, scanners, modems and programs bundled together. Many of the programs were pre-installed. Newspaper advertisements targeted home users, with emphasis being placed upon the young. The implication was that all one had to do was remove the machine from the packaging, plug it

into a power source and one could take off into the digital world. Easy credit was a prominent part of the advertising. By 1999 the major supermarkets were selling computer packages like any other commodity on their shelves.

Affective responses

As changes in computer access and ownership became readily apparent the focus of investigation shifted from quantitative aspects to qualitative, as affective factors formed a greater part of student response. It was during this period that students were surveyed to determine their responses to issues of computers, coursework and marks; ways in which they worked with computers; how they thought the Mind worked, and what it was; how they learned. Students were initially asked for written responses, either in tutor time or in a timetabled lesson. The majority of these sessions took place at the end of the summer term, when there was space within the timetable. It is for this reason that the samples are smaller: Years 11 and 13 were on study leave.

Students were also observed whilst they were working, either in classrooms or during lunchtime sessions. This was followed by discussion.

Uses and gratifications theory

The method of classifying data which I used, adapted from McQuail's Uses and Gratifications typology, was only used for the first data collection. Subsequent surveys generated most of the same reasons for using computers: It was felt that, since the initial classification provided a picture to inform the study, further analysis of the qualitative data using this framework would yield little that was new.

Part of the problem may well lie in the typology itself. The majority of student responses fell in the category of Personal Identity. It has been said that the concentration of responses in this category renders it invalid. However, since students cited other reasons for using computers as well as

the Personal Identity category, it is felt that the link between the tool of the computer and the personal identity of the user is a significant one.

Computers, uses and gratifications: a justification

The criticisms of Uses and Gratifications theory were raised in the opening chapters. In brief, they are that it is too individualistic, that it accepts the uses at face value without interrogating them, that there is no theoretical grounding, that it does no more than collate personal preferences and that it is essentially consumerist, are not directly applicable in this context. The very strong Personal Identity theme corresponds to the work that students are producing with computers, the 'This is me!' factor.

What the framework provided was a tool with which the data could be classified. In that, it more than served its purpose.

