CASE STUDY

Using Focus to teach skills in observational methods at Northumbria University

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Background

My previous experience of teaching observation methods was small - largely due to the difficulty of finding a method of teaching which would involve practical observation with children, since developmental psychology is my area. There are a number of difficulties in involving students in carrying out a practical piece of work which involves the observation of children. If students are to go into schools they must have CRB clearance which is not a prerequisite for entrance to our undergraduate course. Students who are interested in working with children and other vulnerable groups do obtain CRB clearance for themselves but they are in the minority. The large numbers of students that we now have on our courses also make it difficult/ time consuming to organise access to sufficient numbers of schools, even if CRB clearance were available. On the other hand, if students were to be sent out to observe children in public places such as parks and playgrounds this could be regarded as suspicious behaviour and would certainly raise a number of ethical questions.

Some time ago I attempted to teach observation through the use of video, requiring the students to watch an excerpt of children at play and then to develop categories of play behaviours. This attempt was prior to the days of digitisation of video and was really non-viable as the students were in a class of around 25 with only one video player as the resource. They could not be in charge of re-running the video as they wished to develop and discuss codes. The lack of success with this rather half-hearted attempt led to my dropping the idea of teaching observation to undergraduates, with the idea that in the future I would develop a teaching module based on the ‘Observer’ software. Then along came Focus which has proved to be the answer to my difficulties.

Use of Focus

Place in the curriculum. Focus software has been used during the past academic year as part of a year-long second year module entitled “Advanced Psychological Research Methods and Data Analysis”. A synopsis of the module explains that the module aims to provide students with knowledge of the more common quantitative and qualitative research methodologies and associated analyses employed in psychology. In addition, it aims to provide practical skills in the analysis of data (using a computer package where appropriate), and in the conduct of research using qualitative methodologies, in support of the practical programme and in preparation for the Psychology project.
The syllabus for the module includes:

1. Two factor and higher order designs; main and interaction effects; simple effects; fixed and random factors; unbalanced designs.
2. Repeated Measures experimental designs and the analysis of variance: assumptions; control and power; order effects and counterbalancing; one factor designs and post hoc methods; two factor repeated measures and mixed designs.
3. Multiple Regression: observational methods and the issue of causality; simple regression; the selection of predictors; collinearity and suppressor variables; R2 as a measure of effect size; Type 3 sums of squares; the General Linear Model and analysis of covariance.
4. Factor Analysis: the nature of factors and the determination of their number; factor rotation.
5. Statistical Inference: significance, power, effect size, sample size and meta-analysis.
6. Qualitative methods versus quantitative methods: Introduction to observation, interviewing, thematic and discourse analysis, action research, and issues relating to their use.

From this it can be seen that observation is included in two aspects of the syllabus: a) it is discussed in relation to issues of causality and b) it is part of some sessions introduce some methods of qualitative research and compare quantitative and qualitative methods. In these sessions the continuum of methodologies from quantitative to qualitative is discussed and observational methods from structured coded methods to participant observation are presented to illustrate this.

Practicalities. This is a core module which was taken by 130 students during the past academic year. Teaching input was structured as an hour-long weekly lecture for the whole group plus a weekly hour-long workshop for each student in a group of up to 20 students. Focus software was used as the teaching tool in the workshops for 3 consecutive weeks at the beginning of Semester 2.

Technical arrangements. Three months prior to the start of the use of Focus the psychology technicians were consulted in relation to the need for the software to be available to the students on all the computers in the psychology labs and in two other computer labs which are used as teaching labs but which are not situated in the psychology department (and are therefore the responsibility of a separate group of technicians). Both sets of technicians were given copies of the programme to evaluate from a technical point of view (a University requirement) and then to network. The software was approved for networking before Christmas and then loaded (using imaging) onto the appropriate networks during the Christmas break. Following this a sample of the machines were tested and some problems found on some machines outside the psychology department. These problems were in relation to the way the software had been loaded. The technicians in question (non-psychology) undertook to sort out these difficulties. However when I came to start teaching there were still some hitches with a handful of the machines. These were eventually sorted out by the technicians.

Student experience. From the outset of the students’ experience of Focus they were informed that their responses to the materials were to be integrated into an assessed
assignment. The workshops took place in computer laboratories where each student had access to their own computer. In the first workshop they were introduced to the programme and associated materials (Coding and Reliability handbooks and worksheets) via a PowerPoint demonstration. It was explained to them that the coding and reliability worksheets which they would complete as they followed the programme would be assessed as part of their assignment. There would also be an additional exercise using observational methodology which was not included in the Focus materials. This assignment as a whole accounted for 25% of the marks for this year-long module. Students then worked their way through the Coding and Reliability modules of the Focus programme at their own pace. They were encouraged to consult with other students as they went along and to work as a group if they wished. During the workshops a tutor was on hand to discuss any problems they had in following the programme. They could also continue their work outside the workshop time as the programme was available on the computers in the Psychology labs which are open for student use when not timetabled for teaching.

On the whole the workshops went smoothly apart from the occasional problems with a machine (see above). Some queries did arise in relation to technical aspects of the programme such as listening to the sound on the videos and finding ways backwards and forwards through the Focus screens, but these were easily dealt with. The students seemed to find the material interesting and accessible.

Benefits of using fOCUS software

The use of this programme has been extremely beneficial in the following ways:

1. the saving of staff time in that a) staff did not have spend time in preparing the teaching materials and b) little supervision was needed whilst the students worked with the programme.

2. The step-by-step structure of the programme made it easy for the students to follow. The instructions and explanations were full and generally unambiguous.

3. It provided a positive learning experience since students were generally positive about the programme and its accessibility and usefulness

4. Students were able to successfully build on the knowledge and skills relating to observational methodologies that they obtained from following the programme learning to complete their assignment. This involved them in creating and applying their own coding scheme to investigate the changes in interaction between a mother and infant at 2 different ages (shown on video) and writing a report of their work as a pilot study.