Background

Statistics Advisory Services (SASs) have recently been established at several UK HE institutions [1], offering statistics help and advice to students undertaking a final year undergraduate or Masters project or engaged in postgraduate research. A SAS is appointments based and is normally provided in addition to drop-in support offered via a mathematics support centre. Typically it offers statistics advice in relation to aspects of study design, questionnaire design, data analysis, use of statistics software, and the interpretation and reporting of results.

However, not all UK HE institutions currently offer this type of SAS, possibly due to a lack of suitably experienced personnel or financial resources. In response to this, a National HE STEM Programme pilot project operated an online SAS shared between several HE institutions.

The objectives of the project were to identify the practical and pedagogical issues associated with sharing an online SAS resource, and to elicit the opinions of students using the service in order to understand their expectations and experience of using this type of online support.

Implementation

The project facilitated a total of 68 appointments taken up by 46 students from the three partner institutions (Birmingham City University, De Montfort University and the University of Sunderland). A statistics advisor was employed as part of the project, working remotely from her home.

The students met with the statistics advisor using an Elluminate1 online learning space/web meeting tool. The Elluminate learning space was provided by Loughborough University which has recently adopted Elluminate as its primary online learning space. For the last two years this tool has been used to provide online access to the SAS for Loughborough University students who are studying or researching part-time or via distance learning.

Evaluation and discussion

Students’ opinions were sought via a follow up online questionnaire. In addition, more in depth opinions were gathered from three students via follow up case study interviews.

The over-riding picture that emerged from the study was that the students found Elluminate easy to use and both the students and the statistics advisor felt that this
tool has many advantages for use in the provision of this type of online support, particularly in view of its easy to use application sharing facility. This means that statistical software such as SPSS or Minitab, or indeed Excel, can be shared simultaneously by both the student and the statistics advisor. This allows the statistics advisor to see the student’s data during the appointment.

However, many students did experience some technological issues during their appointments. These were reported across all institutions and related mainly to either difficulties with the audio or to connectivity problems. The occurrence of both of these problems does, however, depend very much on the computer hardware and type of connection being used by the student. These problems could be removed to a large extent if the student had access to a PC at their host institution, which was known to have a good wired internet connection and a headset that functioned correctly using Elluminate.

Some students also displayed a lack of confidence with using this type of online tool. This may be partly due to a lack of previous experience with the technology. Where the student’s first language was not English, communication difficulties may also have been a contributory factor to this lack of confidence. Some of these problems with lack of confidence can be overcome to some extent by giving one-to-one instruction on using Elluminate before their online appointment. Note that all students were given written instructions on using Elluminate prior to their appointment and also pointed to a video providing further instruction if required. Some of these students did also receive one-to-one instruction in the use of Elluminate by a local contact at the host institution.

If such a shared SAS resource is being considered in the future then it seems clear from this pilot that a local contact at each partner institution forms a vital component of the success of the service. This same person could also provide a screening function, similar to that undertaken at some of the host institutions during this pilot, to ensure that their needs could be satisfied via the online SAS.

In terms of the pedagogical value of the service to the students, 85% of the students completing the survey reported that they were able to obtain help with “Most” or “All” of their statistics problems and the remaining 15% reported that they were able to obtain help with “Some” of their statistics problems. Furthermore, all but one student in the survey considered their overall experience of the service to be “Good” or “Very Good” and these same students said that they would use this service in the future if there was no alternative source of support and would also recommend this service to a friend.

Further work and sustainability

This pilot study has demonstrated that an online SAS is able to offer a practical alternative to an institution specific face-to-face SAS if suitably experienced staff are not available locally. In addition, it has shown that is feasible for this type of service to be shared by a number of institutions and that this might offer a viable option in order to share the financial costs of providing such a service.

This work was reported at the CETL-MSOR Conference 2011. A full report will be available to disseminate what was learned in conducting this pilot, with details of the implementation, case studies from the institutions involved and recommendations for running an online SAS service.

We believe that this type of shared service would offer universities a viable alternative means of providing a SAS without incurring the financial costs of resourcing a SAS solely dedicated to their own institution. Given the new climate of student access to information relating to learning support and the proposals set out in the UK Government’s Higher Education White Paper on “Students at the Heart of the System” [2], it would seem sensible to further consider this type of support provision and we look forward to being able to take this idea forward.

References


Note that Elluminate is now known as Blackboard Collaborate (see www.elluminate.com)