

# Case Study

MANCHESTER METROPOLITAN UNIVERSITY



## AUDIO VISUAL CONSULTANCY REPORT



### Project Overview

The Department of Health Professions was a relatively new build area of the university being only 3 years old.

The Speech and Language sub-department had 12 specialist classrooms, originally equipped for specialist speech recording and playback which included ceiling mounted projectors and microphones, sound system, and room CCTV. There were two recording rooms which monitored and recorded the activities of six rooms each.

It was decided a systems review and upgrade was required and after extensive searching for the right company, the Department Head approached Phoenix AV.



#### LOCATION

Manchester



#### DATE

March - August 2018



#### PHOENIX STATUS

Contracted External Consultant



#### NET VALUE

£ 1,950.00



#### MAIN EQUIPMENT

95 Page Report & Recommendations

*We may be small, but we make a big impact*

## PROJECT DETAILS

The Speech & Language Department were having difficulties with the systems originally put in place (see overview above) and that the quality was not conducive to the high standards required. Consequently, the system was not being used in the way required and the department was under the threat of the rooms being re-assigned.

Phoenix AV were approached as an external consultancy company (i.e. not listed on the Purchasing Consortium) and asked to review the system in place and provide recommendations.

Phoenix AV's conclusions were that the original install project had not met the requirements of the department:

- \* There had been no consideration to any acoustic treatment of the rooms / corridors which created high reverberation and echo levels within the rooms and consequently, affected the recordings.
- \* Ceiling microphones were too near the projector fans which affected clear recording of speech in the room
- \* The CCTV cameras used were of a low quality resolution meaning reviewers could not see the student lip-movements as required
- \* The speaker system was designed for venues of much larger size than the rooms they were in, as was the amplifier system which was deemed as over-specified and overpriced
- \* The two control rooms were poorly designed. There was no proper communication between the controller / recorder and the teacher in the room for them to understand what needed to be recorded and what to concentrate on. In addition, the controller could be required to monitor up to six rooms at any time from one control station, switching control and room views making it difficult for smooth operations.
- \* A further two language labs were shown which had a poorly designed, over specified audio system limiting the lecturers' on how they taught within the rooms.

## RECOMMENDATION

Following an extensive review of the situation along with the way in which the rooms were to be used and the type of students and student related issues they had, Phoenix AV recommended the following:

- \* All rooms be treated with Acoustic Panels to reduce reverberation and echo. Some corridor areas as well.
- \* The painting of one of the walls in the rooms could have a positive affect on the type of students they had.
- \* Replacing the projection systems with 65" Screens would improve the teaching experience as well as overall noise levels which considering clear audio recording was so vital, was deemed a necessity
- \* However, in view of the cost - it also accepted the above may be a future fix, therefore for immediate consideration, the microphone system should be removed and replaced by a table based system which would provide much higher sound recording quality with less ambient interference.
- \* Replace the speaker system for a more appropriate one which would provide better sound reproduction and have less of a detrimental affect on the recording.
- \* Replace one of the the room CCTV cameras with an HD system focussing on the lecturer and student.
- \* A complete overhaul of the recording system, replacing it with the Extron SMP 351 In-Room Recorder:

### **The lecturer would be able to:**

- Control their own switching on / off / recording and pausing from their desk screens / control panel
- Review on their own screens what was being seen and control the cameras to pre-set positions / view
- Control multi recording functions from PC presentation / camera views or multi-screen views thus reducing the time to compile, convert and distribute the recordings unlike the lengthy previous processes.
- Review and amend recordings after any session

### **Authorised Users would be able to:**

- Log in and view live streaming sessions of teaching sessions
- Log in to access previously recorded and saved sessions

- \* Another advantage of the recording system changes was that both of the recording control rooms could be released for other use as there was already an available editing suite.
- \* Due to the nature of the system, there would have been little required in terms of network integration if used as a stand-alone solution or, it could be integrated into the university server and network if required.
- \* A recommendation was made to update the two separate Language Labs to the Sanako Study 1200 system as this would not only improve the in-room facility for the lecturer, but with the additional switching recommendations, meant that the lecturer could actually teach into the two rooms at the same time from one location. (Each room catered for between 18 - 21 students).

The Sanako system would allow the lecturer the ability to view all or individual students' screens and progress from their own teaching screen as well as the ability to show any individual's screen to the class.

The addition of desk acoustic panels would also reduce the noise levels significantly allowing for easier speech comprehension for the individual students as would the recommended headset / mic option.

### Consultancy Report Format

The report was divided into easy to understand sections providing an extensive review of the current solution, its advantages and disadvantages and shortcomings; a full recommendation for upgrades including product images and specifications; installation procedures and implications; full costing breakdowns as well as training and support recommendations.

### CONCLUSION & OUTCOME

The report was accepted by the teaching staff and, following a tender review based on the report, Phoenix AV were still deemed to have the best solution and price. The project was awarded to Phoenix AV and signed-off by the Dean to be installed during the October recess.

Unfortunately, at the last moment the IT Department (who had been involved with the original set-up) raised an objection claiming that it should be awarded to the original company with whom they still had a contract. This was eventually upheld by the finance department although the Language Department strongly objected claiming proper selection procedures had been followed, and the issues of install from the original provider.

At the time of re-writing this case Study (31st July 2018), almost one year on from the initial visit and report - the project has still not been resolved and the language department are still requesting our proposal be put into place.

## Improving basic ideas and concepts



Microphone too close to ceiling projector  
(Recommended desk based solution)



Open desk microphones for a language lab  
(Recommended replaced by Sanako Headset System)