The number of formal educational programmes that include sound reproduction as an area of study can be difficult to deduce due to the difficulty in determining the extent of its inclusion.

This highlights some of the challenges and considerations in designing and delivering sound reproduction courses. The Creative Industries Council in 2012 identifies a number of challenges for the course is how to provide the breadth of subjects to allow for varying opportunities for technical and practical study or skills development.

Various institutions and organisations view formal education programmes as a routine intake in the ‘creative industries’. In the United Kingdom, the universities – and it needs to be tackled urgently if we are to remain globally competitive.

The Audio System Design Module is a key module in the Audio Engineering pathway on the course and is delivered in the second semester of the academic year. It has been chosen for discussion as it is indicative of the course ethos particularly with respect to audio engineering and sound reproduction issues. How this module serves both the students needs, the expectations of industry and how it fits in with the wider curriculum are also of interest. The Audio System Design module curriculum considers the audio signal path from source to destination, with a focus on issues of signal quality throughout the signal chain.

The module has the following outcomes, which are intended to both support further study and acknowledge the requirements of industry and therefore students will have:

- Used industry standard handheld sound level meters and analysers
- Measured industry standard loudspeakers and mouth of microphones
- Listened to and measured the output of loudspeakers
- Manipulated audio signal paths and measured the impact of this

The module features a weekly lecture that covers underpinning theory and a practical laboratory tasks, which explore key theories and practices, and are contextualized in order to support both the technical and creative areas of study.

The BSc (Hons) Music Technology degree programme at Leeds Metropolitan University has been established for around 17 years and presently has approximately 300 students across the 3 years of the degree. One of the key challenges for the course is how to provide the breadth of subjects to allow for a range of careers in the creative industries yet still produce graduates with the depth of understanding required for technical careers in sound reproduction.

The curriculum for the course has recently undergone a refocus in which subject themes were created to help provide pathways of development through each academic level. These are: Audio Engineering, Acoustics, Recording Practice, Computer Music, Critical Studies and Professional Practice as shown in Figure 1. The course themes represent well-established curriculum areas in Music Technology and as well as providing clear pathways for students, are starkly relevant to the job market.

The results demonstrated positive indications that students spent more time considering the ‘auditory signal chain’ in line sound environments and the study of audio specifications has helped to other areas of course. This was followed by students undertaking shadowing of professionals or location work, which could also prove beneficial.

Conclusions and Further Recommendations

This paper has highlighted the need for HE courses that include the area of sound reproduction to have a clear eye on the needs of industry and feature learning activities that engage students in realistic and industry-relevant ways. If the evidence from this study is representative of other students in HE institutions then it could be assumed that many students on these types of courses are already engaging with their chosen area of industry. Course providers will therefore need to consider ways of enhancing this sort of activity both within the curriculum and methods of teaching. Possible areas to consider would be to undertake shadowing of professionals or location work which could prove useful for students who are not currently engaged with industry work.