[**https://www.ioa.org.uk/acoustics-and-music-forgotten-link**](https://www.ioa.org.uk/acoustics-and-music-forgotten-link)

**Acoustics and music: a forgotten link?**

*Luis Gomez-Agustina, September 2017*

It is well accepted and understood that acoustics is the physical underlying phenomenon and vehicle of music production, performance and composition. It deals with the aural interactions between the instruments, performer, listener and the environment where sound is produced.

This essential link between acoustics and musical performance, however, appears to have been ignored or taken largely for granted by performers and music educators in the UK.  Musicians, composers and conductors around the world (and specifically in the UK) complete their extensive musical training without a basic understanding of the fundamental understanding and practical knowledge of the science supporting and influencing their practice.

The acoustics group at London South Bank University (LSBU) has been conducting long term research into hearing conservation of performance musicians. Over the past 10 years the group has been monitoring the hearing acuity and occupational noise levels of Royal Academy of Music students. It has been during this collaboration that it was realised the total disconnect of music students and academics between their art-profession and the most basic acoustic concepts. As acousticians and academics we feel that we can bridge the gap.

The group is now looking at identifying and evaluating the perceived value, suitability, and attitudes towards the potential introduction of basic acoustic education in UK music performance training. From an extensive literature review it appears that this initiative has never been considered or implemented before anywhere in the world.

The overarching question of this novel research and initiative is to establish whether such an introduction could enhance the holistic approach to musical understanding whilst creating better-informed musicians. No study or research has ever been undertaken

Basic acoustic education in this research covers topics considered essential for the holistic training of musicians, customised for the intended audience. Topics could include: the nature of sound, the auditory system, hearing conservation, psychoacoustics, room acoustics, acoustics of performance spaces and musical acoustics.

One of the sources of data for the ongoing research is an online survey aimed exclusively at trained musicians, performance music students, music graduates, performers, conductors, composers, music academics and teachers, music researchers, managers of music education institutions, and acousticians trained in music.

The questionnaire takes only around 3 minutes to complete and can be found at this link: [Introducing basic acoustic education in music performance training](http://goo.gl/forms/AwBFy7npkD)

From a preliminary prospection among centres which deliver the IOA Diploma course in UK, it appears that about one third of students come from music related background (music related qualifications or music related industries).

Complementary to the above study, the LSBU acoustics group are also looking at the career change and employability of acousticians who once pursued career in music and music related industries. Acousticians in that group are also invited to participate in this research by completing a 1-minute online survey accessed via this weblink: [Acousticians from Music careers](https://docs.google.com/forms/d/e/1FAIpQLSejvfH4qZhnJ6CNtbWxe396IOZv6kn61B1MLfwtpzGiOZznDQ/viewform?c=0&w=1)

Results from both studies will be published in the Acoustics Bulletin and it is hoped they will help to inform and influence decision making in music and acoustic education.

Both surveys will close on 15 October 2017

