

Some thoughts on the future of classroom music

I'd like to preface this paper by saying that there are so many rewards and benefits for any person, young or not so young, from learning to participate, create and appreciate music that we shouldn't be so swept away by its magical qualities that we make unrealistic claims for it either. On the eve of the Second World War, Germany was perhaps the most musically literate nation on earth, at least in terms of the western classical tradition. The composer of the immensely successful *Carmina Burana*, Carl Orff, had developed a music teaching method, *Schulwerk*, that had been widely adopted in schools across the country and he was negotiating with the cultural department of the Nazi government for it to be rolled out and made compulsory in all primary schools across the whole Reich. The Third Reich administration generously supported orchestras and opera houses, Germans sang and played instruments, their appreciation and knowledge of the classical repertoire was – by the standards of the day – rich and deep. But this did not stop them descending into cruel savagery and barbarism. Nor did it occur to them that there was anything peculiar or contradictory about ordering inmates to play Mozart in a prison camp. Unfortunately it is not enough simply to say the two things – love of classical music and descent into totalitarian psychosis – are totally unconnected or a sad coincidence of history.

Because what the Germans had developed at this point in their nationhood was a sense of cultural superiority. They looked back at that extraordinary roll-call of ethnic German artists, writers and especially composers – Bach, Beethoven, Schumann, Brahms, Wagner, adding in the honorary German Austrians Mozart, Schubert, the Strausses etc – and concluded that they really *were* a kind of Master Race. Who else could match that? This superiority complex had been a while fermenting. In 1905 a German critic published a now-infamous article in which he described Britain as the 'land without music', because Britain had never produced a Beethoven or a Wagner, nor, for that matter, a Berlioz, a Chopin, a Verdi, a Tchaikovsky or a Grieg. What he completely ignored in his musical audit of the UK was any other form of music that might have been flourishing in these islands – folk music, or popular song, or amateur choral societies, nor did he mention the phenomenal worldwide success of Gilbert and Sullivan, whose clever, witty, dazzlingly skilful comic operettas had given immeasurable joy to millions. At the end of its first year of performances in London's West End, in 1885, it was estimated that there were already 150 other productions of Gilbert & Sullivan's *The Mikado* up & running elsewhere in the world.

What was going on in *Das Land ohne Musik* was a distinction between 'high art' and 'low art', a distinction I loathe, since it invariably tells you nothing about the music being described and everything about the person describing it.

So in talking about how we enthuse, inspire and educate young people in their discovery of music I feel it is very important to leave to one side this odious upstairs-downstairs view of the art of music. That's not to say, of course, that there aren't differences between styles, genres, expectations, performance techniques, sensibilities, audiences, motivations, intentions and outcomes when comparing, say, a popular music hall song like *Gilbert the Filbert*, and Richard Strauss' *Der Rosenkavalier*. There are, and they are differences worth dissecting and evaluating. But trying to

sort out which composers or genres are 'better' than others is ultimately an arid and pointless pursuit which, as we have seen, can lead to some very toxic conclusions. It is also worth reminding ourselves that a knowledge and appreciation of classical music, for all its myriad merits, does not make you a better, more 'civilised' person. What it does do is make your brain work better. It also gives you enormous pleasure for your whole life: not a bad outcome for starting to learn it at school.

I would also like to say at this point I am not a teacher. At least not in the sense that I go to a real classroom and teach real students, even if occasionally my TV programmes have, for better or worse, sometimes been described as the televisual equivalent of a music lesson you have been made to sit through. So I offer my thoughts not as an 'educational expert' but as a friendly onlooker with a keen interest in seeing music education thrive, and as someone who works in the outside world as a composer, where I do detect from time to time disconnects between the way music is experienced and practised in that outside world and in schools. It is these disconnects I'd like to address.

The benefits of active participation in music-making, in singing and playing instruments, in being part of ensembles, shows and performances, are now well documented and generally accepted by anyone who has witnessed its effects, including the movers and shakers of education policy in a pyramid leading to the Secretary of State. The rewards cited include team-building, co-operation & collaboration, raising of self-esteem, problem solving, accelerated learning, memory reinforcement, enhanced neural wiring, appreciation of the talents of others, confidence to perform in public, the nurturing of the whole child and the ability to address, process and come to terms with emotional, hormonal and social change. These are big claims but they are now backed up by a titanic body of research from all over the world. This is what extra-curriculum music does for children and young people and if you were a parent well-off enough to be contemplating spending £15-30k a year on your child's education, you would expect nothing less than that your prospective school offered a wide range of extra-curriculum musical activities from singing in a choir, learning at least one instrument to a decent standard, playing in a band or an orchestra to jazz clubs and annual musicals. These possibilities are a given in independent schools.

In the maintained sector things are less cut and dried, with such forms of music-making offered sometimes by the nearest Hub (the successor organisations to the old County Music Services) and sometimes by the school's own music department, or a combination of the two. Nevertheless the gap in resources and staffing provision in music between the average state school and the average independent school is fairly wide and becoming wider. For a while, that gap was closed in some places in the early 2000s by the introduction of specialist status in music for some state secondary schools, bringing with it additional funding for equipment, state-of-the-art facilities, staff and some buildings. Mostly in state schools of whatever constitution there is a funding link between the number of music staff needed to teach music as a classroom subject and how much extra-curriculum music activity goes on. It's possible - indeed probable - in an independent school to have a member of staff who is paid solely to be responsible for some aspect of extra-curriculum music-making (as it is, incidentally, in High Schools in many American states) but in a UK state secondary school this is rare.

We have a tradition in the UK of expecting music to be provided in school as well as out (hence the relationship between Hubs at county/town/regional level and schools' own music departments). In France or Germany, typically, music is something you do in a separate place outside school hours. The concept of a 'school orchestra' or a 'school choir', or even music as an academic, classroom subject alongside languages, maths and science at a 16+ exam level is more or less non-existent in French and German schools. That's just the way they do it. And you can get a perfectly good education in music in those countries, it's just that you wouldn't get it at your local school, in normal school hours. We have chosen our path of in-school music and we do our best to make it work with often perilously limited resources, relying on the individual charisma, effort and expertise of a tiny number of overworked school music teachers. However, I don't think most of the general public, nor the decision-makers in educational circles in Whitehall have any idea how close to extinction this tradition is in many British schools.

So my focus here is on classroom music as a subject, because without a successful version of classroom music in the schools that educate 93% of our children, without pupils choosing it for GCSE at 14 (it's theoretically compulsory up to 14), the extra-curriculum music will disappear too, taking with it all the benefits listed above. It has been announced that the GCSE/AS/A level music courses are to be overhauled in line with the slimmed-down national curriculum coming into effect this year so this strikes me as a good opportunity for all of us interested in this field to offer some thoughts on what a future school music syllabus for these levels might be. What follows is my (humbly-proposed) wish-list.

- In the 1960s, approximately 5,000 students a year took the old Music O Level. It was considered a relatively specialised course for those wishing to pursue music or arts thereafter. The motivation in the 1980s to widen the scope and embrace of the 16+ level music intake to include many children with a love of and aptitude for music who might hitherto not have chosen Music O Level, leading to the creation of the inclusive, broader Music GCSE, was a good one. But Music GCSE has thrown up its own, less-than-ideal flaws in its wake. Its inclusive nature has made it vulnerable to the accusation that music has become a 'soft' subject, that it's not academically as rigorous as, for example, the sciences (of which, by the way, in the past, many philosophers have claimed it is one!), that it should not be considered a 'core' subject and therefore downgraded in the allocation of timetable hours (one quick way of making sure a subject *is* shallow, by the way: how worthwhile would a history course be based on 90 minutes contact time a fortnight?). Actually, as a language and a science and an art, music is not at all 'soft'. It is a complex, alternative way of expression with its own concept of time: anyone who claims it is 'easy' would do well to take the course first, then re-consider the accusation.
- That said, all is not well with the course as it stands. Often our most able young musicians struggle with it, finding it dull, or haphazardly put together – a ragbag of bits and bobs from here and there, the ticking of boxes in a hurried attempt to cover so huge a territory, lacking focus and clarity – oddly inconsistent with what they are simultaneously learning in their instrumental and singing lessons, operating on wildly different levels of attainment, and so on. Marking appears well-nigh impossible to comprehend, mired as it is in subjectivity and

taste. The 'marking' of *composing*, in particular, sounds like a bad idea before you've even started. Many music teachers will honestly say they do not know how to help their students get an A* in Music GCSE, so capricious is the marking system. If the students who are most likely to choose it and want to do well in it are not enthused by Music GCSE, then we know we are in trouble. So we need to re-invent Music GCSE as an interesting, worthwhile, engaging, stretching academic subject so that it cannot again be lampooned as less worthy of inclusion in a list of core subjects. The UK is the second largest exporter of music to the world after the USA. It is an important industry for us and we punch well above our weight in it across the globe. What is *not* core about that? It's true that superficially, music may not appear at first glance as *useful* a subject as, say, economics or engineering. In some ways, though, the strange cocktail of skills acquired through a music education are in many ways more suited to a 21st century notion of usefulness than almost all other subjects. It is worth noting that in university orchestras, choirs and bands, a disproportionately large number of participants are in fact studying scientific and medical degrees, not music. These students find music as a spare time activity hugely rewarding, fulfilling, stretching, and entirely compatible with their principal studies. Music's skills are infinitely transferable. Not just across life's many possible paths but also across continents, cultures and languages. As I hope to reveal.

- We cannot let ourselves be distracted by the kind of debate that has scarred the remoulding of the History and English curricula. Re-inventing Music GCSE really is not about finding a list of pieces that somehow package our heritage neatly into a survival pack for young people, even if contributors to Radio 3 web forums get increasingly irate about what is or is not in such a menu of GREAT music. Our priority should be on which musical **skills** and **techniques** we want to pass on. Mining the priceless treasures of the western tradition should be done *through* acquiring those skills. The best way by far to learn about Bach is to play Bach. The best way to learn about musical techniques is to discover them through playing and singing. The excellent resources of [Musical Futures](#) have had such success in so many classrooms, especially at KS4, because of the imaginative ways they promote to get pupils playing, collaborating and experimenting so swiftly, spontaneously and enthusiastically. When children have acquired the appropriate skills and techniques in music, learnt its grammar and language, then the whole, vast kaleidoscope of music out there is available to them for the rest of their lives. The *first* job, though is to acquire the skills.
- Composing has been a fairly significant part of GCSE Music since its inception. There are many skills required to compose and it can be a highly fulfilling way of discovering music but I am dubious that it can be assessed in a marking system. It would be much better for everyone concerned if *all subjective criteria were removed* from the marking of submitted papers. Taste cannot and should not be a factor in the assessing of someone's ability to compose. I am not even sure anyone, including me, *learns* how to compose anyway. The way you learn to compose is through **imitation**. And the way you learn imitate is by analysis. No-one taught Bach or Mozart or Paul McCartney how to compose. What they learnt to do was scrutinise pieces by other composers they wanted to emulate. Through careful listening and the development of their aural faculties, they got better at identifying what it was that was going on in the music they liked, and then how to copy it, their way. As a

choirboy, I imitated my favourite choral composers, William Byrd and Kenneth Leighton; as a teenager I imitated my favourite pop stars The Beatles, Gilbert O'Sullivan, Supertramp, Paul Simon; as a young writer of musical theatre I turned to Kurt Weill, Leonard Bernstein and Kander & Ebb. 'Learning' to compose is primarily learning to *listen*. And it *is* possible to examine and assess whether a pupil has successfully mastered the art of imitation. At university, imitation, or pastiche, was given a posh-sounding name, Harmony & Counterpoint. But that's exactly what it was. At school I wrote songs like (but nowhere near as good as) Paul McCartney. At university in the 1970s I wrote like Mozart, Bach or Palestrina as part of my undergraduate course. It was the same, readily transferrable skill. In the two years immediately after I left university I was required to write a song a week for the topical comedy *Not the Nine O'Clock News*, invariably parodying one current pop style or another. In essence, the task was no different from being asked to write a string quartet in the style of Haydn.

- Of course, feeling, expression, imagination, yearning, emotional engagement, passion – the buzzwords of the creativity universe – are all possible and indeed desirable in composition. But they are not qualities you can **teach** and they are certainly not qualities you can **test** in an exam. They come with the package of being a human being.
- Sting gave a wonderful [TED talk](#) earlier this year. In it he describes his journey from writing as a young man with an inward focus on himself, his feelings, his preoccupations, his ego, then discovering that this was ultimately limiting. After a while he reached a stumbling block and the music appeared to dry up inside him. He tells how he came out of this trough by thinking about his father, his family and the ship-building community he grew up in on Tyneside, once proud and rooted, until the 80s and the closure of the dockyards and the consequent loss of that community and its stories. He found by summoning up this lost world, recovering those memories, people and their stories, his music came flooding back too. His overriding theme was that the artist is at his or her most alive and inspired when focussed outward to others, when he or she empathises, observes and gives a voice to that community. In a sense, all musicians have to find their centre, some way or another, and playing in a band or ensemble or singing in a choir is one way of losing one's self and finding a sense of community and rootedness in the musical group. One might call this process the discovery of **musical humility**. In giving voice to the voiceless, the creative artist is ennobled. Creative humility is an underrated process and one that can be brought out in a number of ways when learning music.
- Principally, it is a recognition of the wondrous music that always precedes you and an ability to deconstruct and re-create it, as we have seen in the acquiring of compositional skills. This can be any music you love, it does not have to be 'important'. It is often the music that an inspirational or charismatic teacher loves and wants to share. Young people are more attuned to the personal enthusiasm of the teacher for a work of art than they are to the fact that the work of art is on a list somewhere, deemed to be significant. There is no hurry. We don't need to uncover the whole catalogue of previously-created music at school, nor even the whole catalogue of skills available. The unravelling of music's mystery is a life-long exploration, not a sprint to get a grade.

- It was my very great privilege to have played a tiny part in the opening ceremony of the 2012 London Olympic Games. One part of my contribution was to construct the musical 'map' of Rowan Atkinson's sketch in which he appeared as a bored member of the London Symphony Orchestra. First, the detail of the sketch, in particular the micro-timing of it, were worked out in a room with Rowan, myself and Richard Curtis. Then I had to go away and work out a version of Vangelis' *Chariots of Fire* theme that would be adaptable to this sketch in its every minute detail, to accommodate the rise and fall of Rowan's comic narrative and indeed the actual (musical) part he would play on the keyboard. After a point in the sketch, we cross-fade from the live stage performance to a pre-recorded piece of film recreating the opening scene of the film on a beach in St Andrew's. The film section of the sketch therefore had to be scored, frame by frame, to tell its part of the story (Vangelis' original is the same 'mood' all the way through, it was not intended to be 'spotted' to an individual section of film action, as we were attempting to do), after which the action returned to the live stage for the conclusion of the scene with Rowan and the orchestra again, with a climactic comic end, of sorts (Vangelis' original does not end, as such, it fades out). All of this had to be knitted together into a continuous musical whole. The original recording was made using *only* synthesizers, so my next task was to give the symphony orchestra a meaningful role in the overall sound, both underpinning the synths and also having something of their own to do that would sound in keeping with the original but distinctive enough to make their involvement seem slightly more portentous and exciting for the Olympic occasion. With that orchestration underway, I had to research which exact models of synthesizers Vangelis had used in his original recording back in 1981, then recreate their sound as precisely and faithfully as possible, now adapted to 'our' version of the track. All of the opening ceremony's music was recorded as a fail-safe in the event of sound failure on the night, live to billions worldwide, a soundtrack that would run, second by second, in parallel with live performances in the stadium, so this then had to be made. I admit I was a little shy in the studio about giving Sir Simon Rattle and the LSO notes on how we wanted the performance to sound and a little overawed, but the job had to be done and my task was to deliver to Danny Boyle and to Rowan a musical foundation for the sketch that was absolutely watertight and would work apparently seamlessly on the night. Which, hurrah, it did. I say all this not to blow my own trumpet, since I was a VERY small cog in a VERY big wheel that night, but to reflect on the experience thus: all of the skills I called upon to deliver this end-product, other than my familiarity with the Industry-standard Pro Tools recording software, I had begun to learn at school. Analysis, deconstruction, imitation, and reconstruction of a piece of music. An understanding of voicing, ensemble, arranging. Keyboard skills (I was lucky to have played one of the first commercially-available Moog synthesizers in the UK when I was still in Year 12). Problem-solving, working in a team, responding to the wishes and needs of other creative figures in the project, and a sense of humility that this could *only* be achieved with maximum collaboration and minimum ego would also be on that list (though I doubt I had any kind of restraint on my ego at school!). The other observation I'd make is that I could not have completed this task to the required standard, I don't believe, until my mid-40s. I *started* to learn music at school but I have *continued* to learn music ever since. What the school part of music-learning needs to do is to

ignite the motivation to discover more, not to see oneself as the finished article (at any point..). Playing in musical groups, understanding that fundamentally music is a collective act, this is crucial to good development, even if the student *doesn't* go on to read music at university or pursue music as a career.

- If you were designing an education system from scratch today, how would you best teach collaborative problem-solving, the ability to analyse something, deconstruct it, put it back together again with a personal twist, think inventively, always with an acknowledgement of the achievement of others, past and present? Wouldn't you do this by **teaching music**? Wouldn't that, in fact, turn out to be, in the 21st century, a core, transferrable skill?
- Improvisation. It is something of a myth that musical improvisation is 'making stuff up on the spot', 'playing whatever comes into your head', 'freeing your imagination and surfing on a wave of ideas and sounds', or 'doing whatever you want no matter the level of skill on the chosen instrument'. Improvisation, in the wider world of music, is rather different from this caricature. In fact, as it is practised all over the musical globe, it is another way of manifesting musical humility. Whoever is improvising, Jimi Hendrix, Jamie Cullum, Bill Evans, Courtney Pine, Olivier Latry, the titular organist at Paris' Notre Dame, or the late Ravi Shankar, the matrix is the same: years of study and absorption of the style that is to be explored, countless hour upon countless hour becoming familiar with the harmonies, rhythms, structures, ornamentations, modes, riffs and figures of the 'parent' style. There is always a template. Which is why when Miles Davis started improvising with his band, it didn't suddenly sound like Chuck Berry, or Glenn Miller or *Oklahoma!* When Hugh Masekela played with the Jazz Epistles in 1959, they did indeed sound like jazz, not like Tchaikovsky. The greatest improvisers create their magical, apparently spontaneous flights of fancy from a very *unspontaneous*, painstaking training. And lest you think I'm being Eurocentric here, the guru system of teaching musical instruments in the Indian tradition is far more insistent on improvisation only being possible when the student has a thorough, memorised knowledge of all the tala, ragas, ornamentations, drones, modes and patterns of the Indian classical heritage. This can mean *years* after the pupil has begun making sounds on the instrument. At the root of all these techniques lies an emphasis on aural training, learning to listen intently, with insight and respect. Which is where the musical humility comes in. In the West we have come to venerate the young and dismiss the old, valuing the rough, unvarnished, 'authentic' voice of youth, as if it is all of importance because it is therapeutic or esteem-raising for the young creator. This pendulum could probably do with a gentle nudge in the opposite direction, so that young learners get a sense of the value, to them, of the music that precedes them, from whatever genre or whatever tradition. In the spirit of this, improvisation at school-learner stage should be seen for what it is: fun, useful, necessary, and a brilliant way of becoming comfortable with one's instrument (or voice), but not yet a 'skill' and probably not to be elevated to the status of 'composition' and submitted for any kind of test, exam or qualification. Every composer in history on every continent of the planet has begun their quest by experimenting with improvisation. Learning to improvise is a valuable way of perfecting technique and of really inhabiting the world of the chosen parent style. But it is not, at school age, an end-product, it is a process. If you were inventing an education system from scratch today, you might judge that learning to think on

your feet, to absorb and transform incoming data and to trust your instinct, was of critical value in a modern society. How would you help young people develop this in themselves? Through musical exploration.

- It is, I'm afraid, a persistent myth that all forms of musical notation are equal. That a scribbled chord chart such as David Bowie handed out to his band when recording *Life on Mars?* is as valid and effective a form of notation as the western stave system, that a MIDI piano-roll print out, or that tonic sol-fa is all you may need to become a musician. We are embarrassed about saying it, because of our colonial past, but for better or worse, despite its many flaws and inconsistencies, western notation as originally conceived by Guido of Arezzo and fine-tuned for the subsequent millennium, is still the most logical, most universal, most accurate form of musical notation available. Which is why young learners in China or Japan or Indonesia or Japan, all of whom have grown up in countries with their own non-Western musical traditions, learn stave notation in order to play and sing music. It is a standard system, a common language, and it is perverse that we would ever circumvent the teaching of this system to British children taking GCSE Music. It is absolutely unacceptable that anyone should pass GCSE Music without being able to read and write the language of music in the form of traditional stave notation. It is also irresponsible to trick children into thinking they can 'get by' without it, citing random popstars who do not read music (surrounded by experts covering up the gaps in their skill-set, or deliberately concealing the fact they learnt instruments and notation and sang in a choir at school in order to appear to be cool). When I left college in 1979, my first few years of financial survival in London depended on my being a session keyboardist for pop and TV recording sessions (there was quite a lot of that kind of work then, before the digital/sampling era). At that time, the majority of rhythm section players – drummers, bassists, guitarists – did not read music but read from chord charts instead, with minimal information on them, since they would be told by the artist or musical director verbally, in the studio on the day, what style, rhythm, groove, speed, figuration, sound setting, dynamics would be expected. These days, 30-odd years on, it is rare to come across a professional player on any instrument who does not read notation. When I first started writing and putting on musicals, 30 years ago, the way we taught the cast members the songs, harmonies and any counterpoint, was by bashing them out at the piano, singing them again and again until they had learnt them by ear, with just a script of the lyrics in front of them. Occasionally they might record your rendition onto a hand-held Dictaphone (nowadays, phones) to continue the parrot-fashion learning at home. These days, with London one of the world's two epicentres of musical theatre, *all* cast members coming into shows learn from notated scores. There has been a revolution in the up-skilling of that particular industry. The so-called 'triple-threaters' graduating from the leading drama schools and colleges are in fact now quadruple-threaters, with reading music being added to their portfolio of dance, acting and singing. I would guess most of these young performers learnt to read music not as part of their school GCSE course, though I may be wrong, but as part of ABRSM graded singing exams which have become the school-age staple of prospective stage performers.
- Steven Price is the composer of the film *Gravity*, for which he won the Oscar and BAFTA awards for Best Original Score, a truly impressive achievement. His score is unusual in that

it is made up of many shifting layers of sound, sampled, synthesized and acoustic (i.e. played by real instrumentalists); it does not sound like 'traditional' theme-based, narrative-led 'spotted' film scoring, conjuring as it does moods and atmospheres that are deliberately disorientating and 'airless', and anyone would be forgiven for assuming that a style of such expansive waves of overlapping soundscapes did not need notated music, since it might have been compiled by the ingenious manipulation of heavily-processed sound files within a Pro Tools workspace environment. Steve and I worked together, he as music editor, me as composer, on the film *Mr Bean's Holiday* in 2007, so I contacted him to ask if any kind of notated score existed for *Gravity*, and if so, what cutting-edge techniques or scoring innovations had he perhaps introduced into it. *Gravity* does have a traditionally-notated orchestral score, 200 pages of it, every note, every moment, every detail, every nuance, every cue impeccably and carefully laid out as if it were a Mahler symphony. What's more, when he heard my thoughts on the value of learning western stave notation, Steve, who read music at Cambridge, was quick to comment, "there's no way in the world I could do the work I do now without having done all that list of things you mention... notation, aural, theory, reading, analysis, structure etc etc. I don't believe you can do anything at all effective or "innovative" without having a good grounding in those skills. There'll always be meteoric-rise pop stars wilfully claiming god-given gifts without the evil taint of any musical education, but I reckon anyone who creates anything of interest does tend to have a rather thorough understanding of the rules they are seeking to bend."

- For film scores, these days one should also read video-game scores, worlds which may seem to the outsider to have left fuddy-duddy musical rudiments behind long ago. Nothing could be further from the truth.
- Many students taking GCSE Music will not, I realise, pursue musical careers, or seek to emulate the spectacular success in film of Steven Price, but others may want to get involved in areas where having learnt musical notation is unexpectedly useful (TV vision mixers, film and video editors and sound engineers are also fields where reading scores is fast becoming highly desirable, if not essential, by the way). Some may want to sing in choirs, play in orchestras, perform in musical theatre shows or join a band in their spare time as adults. Not learning notation at school will *always* seem like a missed opportunity in later life.
- And while we're at it, let's face down the biggest lie of them all: that to be a successful pop star (old-fashioned term but you know what I mean) you don't need the rudimentary skills of reading and writing music. Have you noticed that no such star with a career lasting longer than five minutes *ever* says that? It's partly because they *do* have such abilities and it's partly because when they don't, they very quickly regret not having them, since progressing forward in their chosen genre, beyond the first few songs, is hugely disadvantaged by not having these tools at their disposal, and they know it. If any 15-year-old ever tells their music teacher they don't need to read and write music to be like Jessie J or Adèle or Amy Winehouse or Leona Lewis or Katy B, it may be worth reminding them that all of the above attended the BRIT School in Croydon, the most conspicuously successful performing arts state secondary school in the world. The BRIT School's ethos is one of unremitting commitment to high standards, extremely hard work, the acquiring of all relevant skills, techniques and qualifications, the taking of graded exams in playing instruments, in singing

and in theory at all levels of attainment (including GCSE Music). Pupils on the music course are expected to read and write music and if you visit the campus at half term or at a weekend, even during some of the holiday period, you will find, as I did on a recent visit, the practice rooms and studios being used all hours of the day by students in their own time, rehearsing, rehearsing, rehearsing. If Michael Gove wants 'rigour' he will find no more rigorous learning environment in our country than the BRIT School. Its participation regime is not for the faint-hearted nor the work-shy. Standards are high because the students demand it of each other. Tell that to the 15-year-old who thinks you can be the biggest thing since sliced bread without putting in some serious effort. No. You can't. And while I'm on the subject, it's not my own idea (Andrew Adonis proposed it when he was Minister for Schools in the last government, before he was moved to Transport), but why do we not have a BRIT School in every major city in the UK?

- What the BRIT School does have in bountiful measure is the support of the music industry in terms of resources, visiting mentors and up-to-date equipment. Would that every school music department could have such jewels. Which brings me to the subject of technology and its application in school music.
- I believe there is a good case for the introduction of a Music Technology GCSE, since, apart from the uplift it might give to school music cohorts, it has become such a dominant and inventive part of the overall music and sound industry. Britain is well placed in this field and there is no reason why we could not mine the extraordinary possibilities of technology in music and audio by unleashing the natural curiosity and experimental urge of young people. I am not referring here to pressing 'play' or dragging & dropping some riff or drum pattern (made by someone else) from one window to another in Garage Band. This requires all the effort and ingenuity of claiming you can 'drive' a Google driverless car because you input the destination and sat there for 30 minutes. I am referring to the frontier of exploration into the nature and manipulation of ambient, found and artificially-manufactured sound as well as the editing, crafting and transforming of real musical sound material. I am referring to open-source programs like PureData and SuperCollider, where real-time audio synthesis and algorithmic composition techniques are actually devised by the end user (for free!). And to Sibelius software or learning to use Pro Tools or Logic Pro, sophisticated programs requiring concentration and application to master. A fit-for-purpose Music Tech GCSE (leading to a Music Tech A2) would include learning in depth about the textures, resonances and component aspects of sound, about developments in medical therapies connected with music, and the nature of acoustics. But. Music Technology did not start in the 21st century!
- For hundreds of years, before the invention of the clock, the most complicated piece of technology humankind had invented was a musical instrument – the organ. A Music Tech GCSE would examine the development of musical technologies of the past. For the hundred years between 1750 and 1850, give or take a decade, Britain became the centre for the development, manufacture and dissemination of the then newly-arrived piano, a supreme example of music technology. Why could we not become a hothouse now, once again, for technological advancements in music? If that were to come about, it would be because in school, students were introduced to its possibilities with a sense of excitement and innovation. Music technology can truly *belong* to the current generation in school in a way

even their teachers cannot match. If I were designing such a course, though, I would build in a module that taught about the development of musical instruments of the past, not because of a desire to fill heads with random knowledge for its own sake, nor especially filling those heads for the sake of being tested 18 months later (the *worst possible* reason to gain knowledge!), nor because the past will help them feel proud to be from a pioneering industrial country, but because the experience of previous innovators in sound and music technology, close as they always were to musicians and composers in their endeavours, are a brilliant resource for future ideas, springboard for the question ‘what if?’, a way of re-imagining a now-forgotten notion as seedbed of the next. When Robert Moog made the world’s first commercially-available synthesizers, their dazzling new sound was introduced to the world, in 1968, on a vinyl record made by Wendy Carlos. What is doubly remarkable about this record is that it comprised performances (played, with admirable patience, monophonic line by monophonic line) of the music of J.S.Bach. Moog and Carlos, electronic music icons, understood better than anyone that the new sound they were making was achieved by standing on the shoulders of previous masters.

- If we were charged with starting a new education system from scratch today, we would know that being technologically adventurous whilst also being creative and imaginative, was of vital importance to that system. How would we ignite this instinct in young people? By harnessing their love of music to their ease and daring with technology.
- The reason Music Tech needs its own course is because the current GCSE Music already tries to do far too much in too little time, and adding it to the existing menu of requirements would be over-ambitious, to say the least. I understand the intention that went into creating a GCSE Music that would give lots more children some basic grounding in a wide variety of musical experiences. But this fine intention has meant the course skates across the surface of so many of them, when what is really interesting in life – isn’t this true of everything? – is the quirky detail of things, the nuances, the subtleties. If this were not true, no-one would watch Q.I.
- Imagine devising a course designed to give you an understanding of birds. Which do you think would work best – a series of lessons each of which told students a little about a representative sample of the 9,721 species of bird, so that they might on a clear day (or, more likely, in an exam) recognise the difference between a Himalayan Snowcock and a Greater White-fronted Goose, or between a Macaroni Penguin and a Goliath Heron, and that in addition it would expect students to have a broad overview of the 204 families of bird species? You might throw in, for 30% of the marks available, a task whereby the student makes up his or her own bird species and records its imagined mating call for submission to a bird-song expert in ‘originality’.
- Or would you design a course which properly, purposefully investigated one species of bird, one that you might see every day of your life, in order to discover how it migrates thousands of miles, and why, and how exactly it **flies**? Isn’t this the most extraordinary, miraculous, life-enhancing, joy-bringing question of them all? Poets, composers, artists over the centuries have marvelled at this single, sublime wonder. Leonardo da Vinci compiled an entire codex (book) on the subject of the flight of birds, full of amazing drawings and diagrams. Wouldn’t

that be a more interesting course than the one which expected the memorising of the wikipedia page on bird names?

- So it is with music, a beautiful miracle that we have inherited and which haunts, moves, stirs, elates, arouses us, and whose secrets are available to all to grasp and enjoy as listener, player, creator or interpreter. How it works, what is going on under the bonnet of the engine, how to understand its component parts, how to reproduce it faithfully, how to read, write and hear it, aren't these the skills we would want students to be given?
- And so, if there are to be set works to scrutinise, let there be a HUGE list with ENORMOUS choice so that teachers may choose what works for them and their pupils, but to be able to look in detail at just one work for a whole term, if preferred, to explore what lies around it, its influences and spin-offs, rather than to tick a box and move swiftly on to the next 'masterpiece'.
- And so, to free up time to explore and experiment, to meander and wonder, it would be better to scrap the AS staging post and revert to a 2-year course with exams only at its conclusion. More radically still, why not create a separate History of Music A Level course, liberating 14-16-year olds from the vast, terrifying catalogue of the past, so that they may concentrate their classroom time on understanding *music*, not the strange, distant lives of its creators. If GCSE Music gave students a proper grasp of the skills and techniques in its perilously short 2 year span, that would seem a worthwhile trade-off.
- And so, it would be much better if unravelling the miracle of music was a task conceived by music teachers, for music teachers, allowing them maximum freedom to follow whatever line of enquiry excited them and their pupils. Testing by external bodies, at the end of such a course, should be as simple, as objective, as straight-forward and as transparent as is humanly possible.
- The skills acquired are transferrable skills of the mind, anyway, so employers organisations demanding this, that or the other from school leavers seem to be entirely missing the point of education. My heart sinks when I hear educational outcomes are being dictated by captains of industry to the Department of Education, as they are from time to time, in and out of fashion over the decades. And what's with the obsession with 'core' and 'non-core' subjects? The global financial meltdown of 2008 was given to us courtesy of people with advanced numeracy skills. If all employers want from school leavers is to be good calculators they would be better off buying one from Maplin for under a fiver. Whose industry are we talking about anyway? The fashion, media and arts sector is one of the fastest-growing in the UK economy, having fairly successfully bucked the recession: if they were asked what they would like from school leavers they might agree that literacy was pretty essential, but they would also ask for students to have developed a flair for creativity and inventiveness. I doubt they would demand more school leavers with better mental arithmetic than their counterparts in Shanghai. Wouldn't it be better all round for education to be devised by people with an expertise in the thing? TEACHERS.
- However, whatever ambitions we may have for improvement of the KS4 and GCSE courses, there is a big snag. We currently expect secondary school music teachers to inherit from their primary feeders children who may have little or no musical experience, then at super-

fast speed bring them up to a level sufficient for the child and parent to make a realistic, informed decision on whether to pursue music at GCSE proper. In many cases, it is like asking English teachers to start a GCSE course in Year 10 with pupils who spoke only Mandarin until age 11. At present there is no requirement on primary schools to pass on information about the musical experiences their children may or may not have to the receiving secondary school.

- This state of affairs would not be acceptable in the fee-paying sector so why is second best allowed to be the case in the maintained sector? A successful and worthwhile music course at GCSE actually begins at Key Stage 2. Apart from anything else, it is dangerously late to introduce teenagers of 14-15 to classical music for the first time, saturated by then as they are in popular culture and steeped in their new tribal loyalties to various genres of contemporary music. The appropriate stage to introduce children to the classical repertoire is when they are much younger, at primary school. I welcome BBC Learning's Ten Pieces initiative in this respect but a much more widespread intervention is called for. Thanks to *Sing Up*, the government's national singing programme which I am proud to say I had a part in between 2007 and 11, group singing in primary schools was saved from extinction and has been resuscitated, in many places impressively and heart-warmingly so, but the job of bringing music to primary-age children is not yet complete.
- Therefore every primary school should have either a full-time music teacher or a musician-in-residence who is there, on site, all week every week, so that musical activity – fun musical activity – including listening to and interacting with classical music as well as popular, takes place all the time, becoming a normal, expected part of school life, and all forms of music begin to sound familiar and approachable. This may need some money, yes, but if we are to do this properly a case needs to be made for it. The long term benefits will be huge, given what we now know about accelerated learning and all the other benefits of music to the young mind. There should be no ifs, not buts. It is no coincidence that the world's most admired state education system is that of Finland; it is also the one with music generously embedded at *every* stage of school life, from 5 to 18. So we know investing in music at primary level works, brilliantly. Give primary schools what all private junior schools have as a matter of course. No second class citizens, please.
- I can think of one way savings might be made, at least in what is spent at the examination stage. It seems to me, an outsider, to be a nonsense that playing and theory skills are tested by examination boards at GCSE when a significant proportion of students have already mastered and been tested on these same skills by taking ABRSM graded exams in singing, playing instruments and theory. When we already have a perfectly adequate world-class examination system in operation involving real-life examiners really listening to live performances, where appropriate, why do we try to reinvent the wheel and layer on a second examining body to do the same job (and charge for it, all over again). May I also respectfully point out that ABRSM and the other music grade boards such as Trinity deliver their results in two weeks. A simple solution, then, is for Grade 5 Theory and Grade 5 on an instrument or voice to be equivalent credit for a percentage of GCSE marks, perhaps 25% each. Double testing playing ability is a waste of everybody's time, effort and money.

Schools could then decide to do Grade 5 Theory in classroom time rather than tackle the same theory requirements (and there should be such requirements, to be sure) separately.

- The simple aim is to give GCSE students a basic grammar and musical literacy. As we find with Grade 5 Theory, these may indeed be slightly irksome duties to fulfil for the student, as Steve Price attested, but they are necessary, and who says life is all about only doing the stuff you really enjoy all the time? What kind of lesson is that, in a competitive world?
- Which brings me to my final point, an observation about music and its place in the world. It is a mistake to think the best way of engaging with someone else's country or culture is to gen up and tell them 5 facts about their country from a tourist guidebook. Obviously. The key is to listen, properly and carefully, as they tell their stories, their perspective, and to offer them up something of your self in return. When musicians communicate through music across national or cultural boundaries, they do so in a spirit of mutual respect, but they are not pretending to *be* the other, they are swapping skills and exchanging vernaculars. There are few better ways of learning about other peoples and their worlds than to share music with them. It is a win-win. Listening to others, developing a sense of respectful empathy, may be the single most important quality we would like to pass on to young people at this difficult, turbulent time in history. How would we teach children, in our newly-invented system of education, to listen carefully to the voices of others? We would teach them music, of course. In fact, our newly-devised system of education seems to have music as its five 'core' subjects. Funny that, isn't it? But it's true, isn't it, music in all its democratic, cacophonous variety is the best possible tool at our disposal to help children make better sense of their world, especially if we strip it of its high/low art snobbery and its obsession with geniuses, maestros and masterpieces. The *only* reason to study and play a piece of Mozart is because of its beauty, its impeccable structure, perfect melodic arc, deft management of harmony and the way it can transport the listener totally out of their body to another place altogether, NOT because he was a Great Austrian in a Proud Tradition of Great Austrian Composers of the European Heritage That Every Child Must Know. It's all about the music. Just the music. That's the key. We even, in the English language, borrow from music the term that expresses our most profound aspiration for the ideal state we would wish for our families, our towns, our communities and our relationships with other peoples: **harmony**. It's that important.