

# ***Pop Music as a Possible Medium in Secondary Education***

***(1966)***

by  
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## **Foreword (2001)**

The text that follows was written thirty-five years ago. It was submitted at the end of the one-year Diploma in Education course I took at the University of Manchester in 1965-66. Fifteen years later, we founded the International Association for the Study of Popular Music (IASPM)<sup>1</sup> and in the same year, 1981, the first issue of the Cambridge University Press journal *Popular Music* was published. Since then, popular music has made inroads into all stages of education. Seen from this perspective, the 1966 text has, I feel, some documentary value: although probably not the first text to make a case for popular music in education, it is to my knowledge one of the earliest written attempts to address the issue seriously.

However, resurrecting this old text for web publication raises two obvious problems: [1] the world has changed a lot since 1966 and some of the ideas and arguments presented then need recontextualisation; [2] I was a very young man at the time and had little or no experience of social science method; nor was I aware of the workings of capitalism or of its influence on subjectivity, on music, on the arts in general, or on education. Moreover, I felt quite alone in my pop-music-in-education crusade because I had yet to find allies in academe who could support, or with whom I could discuss, my ideas. Consequently, this foreword will need to explain some of the problems caused by the text's displacement in time, as well as those arising from within the text itself.

Pop was an odd subject for a music education student to choose at a British university in 1966. Fortunately, my supervisor, Dr. Aubrey Hickman, had accepted me on to the course because, as he told me, 'it's always useful to have one nutter each year', adding that he had never had call to regret taking on us nutters and that 'this year [was] no exception'. Looking back on this piece of work I can easily see why Hickman saw me as a nutter. There were at that time plenty of safer causes to champion than the use of pop music in education. Hickman, a generous, chain-smoking, accomplished viola player, educational psychologist and exemplary humanist, was certainly no avid pop fan, but he was prepared to stick his neck out, first by encouraging me to pursue the topic and then by accepting it as a useful and original piece of work, despite all its shortcomings. I am indebted to him for his patience and encouragement.

From today's perspective I think the work is unsatisfactory when it comes to the formulation of many survey questions, the weighting of responses and the treatment of results (Appendix 2). However, even though I would today have marked the young author of this piece quite severely for the failings just mentioned, I am including the whole essay, with its appendices, warts and all, in this web publication. In fact, the only changes I have made are of a minor editorial nature.<sup>2</sup> For purposes of clarity, all additions are in this font (Verdana) while the original text is in a typewriter font (Courier) reminiscent of those times.

One particularly annoying aspect of the 1966 text is that I was unable to make copies of the questionnaires and diagrams that the project originally included. One reason for the omission is that it was not just photocopiers

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1. For more details see section 'Brief Personal History' in 'High and Low, Cool and Uncool, Music and Knowledge: Conceptual falsifications and the study of popular music', keynote speech, IASPM UK conference, Guildford, July 2000 [[www.tagg.org/articles/iaspmuk2000.html](http://www.tagg.org/articles/iaspmuk2000.html)].

which were difficult to come by at the time: pocket calculators, not to mention spread sheet or database packages and the PCs on which to run them, were all unheard of and would remain unattainable for another twenty years or so. Consequently, the results of the questionnaire and the statistical calculations are unsatisfactory. In fact, all that remains is my mark sheet (Appendix 2) are the results for 209 out of 213 of the respondents in one of the two schools<sup>3</sup> (Appendix 3). In August 1966 I moved to Sweden and in the process managed to mislay responses from over one hundred boys at the other school,<sup>4</sup> as well as results from six pupils at the first one. I did, however, take the precaution of making a carbon copy of the main body of text. It is that text which occupies most of this web publication.

Apart from the erratic response marking procedure (Appendix 2), the other apparent howlers in the questionnaire are: [1] the occasional lapse into unsubstantiated notions of harmonic and rhythmic sophistication, of musical-aesthetic interest, etc.;<sup>5</sup> [2] the division of questions 1-4 in Section B into what by today's standards seem like unforgivably sexist alternatives. The first of these lapses can be partially explained by the fact that my education at an English private school and at Cambridge University had given me very little opportunity to think in culturally relativist terms: it was not until two years later, in 1968, that I met Jan Ling under whose influence I was quickly (and willingly) cured of tendencies towards the application of supposedly universal norms of aesthetic excellence.<sup>6</sup> The second difficulty is directly attributable to the fact that gender division was much more rigid in the mid sixties, not least in the sphere of British pop culture:<sup>7</sup> I simply could not think, at that time and under those circumstances, of another way of offering pupils of both sexes the opportunity to score equally in the pop 'with-it-ness'<sup>8</sup> section of the questionnaire.

There are other ways in which *Pop Music as a Possible Medium in Secondary Education* needs to be read as a document of ideas of its time. Consider, for example, the following:

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2. Those minor editorial changes can be summarised as follows: [1] *he, his* etc., used in 1966 as third-person singular pronouns when referring to both male and females, has been changed to today's *s/he, his/her*, etc.; [2] endings in *-ize, -ization*, etc. have been changed to *-ise, -isation* in accordance with *Popular Music's* in-house style for UK English; [3] three or four clumsy sentences have been reformulated to facilitate comprehension; [4] a few explanatory comments have been added, mainly in footnotes: such additions are always written in this typeface while the original text, footnotes and appendices are in the Courier font; [5] to facilitate comparison I have converted the 'absolute' statistics of questionnaire sections A, B and C (out of 47, 73 and 76 respectively) to percentages (see Appendix 3).
  3. Plant Hill Comprehensive, Manchester, where I had done my teaching practice during the academic year 1965-66.
  4. Central Grammar, Kirkmanshulme Lane, Manchester.
  5. See, for example, questions 8, 10, 15, 24 in section C of Appendix 2.
  6. It was in fact partially thanks to this old 1966 essay that I first met Jan Ling. His first wife, Britt, singer and teacher, was for several years one of my fellow choristers in Göteborgs Kammarkör and had, some time in 1968, mentioned my talking about popular music in education to Jan, who was then in the process of setting up the Department of Musicology. Jan asked me to give a short presentation of the Manchester essay at the Göteborg Department in late 1968. Shortly after, in fact from 1971 until early 1991, when I moved back to the UK, I worked closely with Jan Ling in researching and developing activities relating to popular music in education. See P Tagg: 'The Göteborg Connection' in *Popular Music*, 17/2 (1998), pp. 219-242 [[www.tagg.org/articles/gbgconnect.html](http://www.tagg.org/articles/gbgconnect.html)].
  7. This deplorable but undeniable state of affairs is admirably parodied by Mike Myers in *Austin Powers – International Man of Mystery* (1997) and in *Austin Powers – The Spy who Shagged Me* (1999).
  8. Appendix 2, section B. For explanation of 'with-it-ness', see footnote 46, page 17.

"It would be an anomaly to find a bank manager liking the Rolling Stones in the same way as it would be incongruous to see him driving a £275 Ford Popular." (p. 10).

It would be no anomaly today if a bank manager were to insert *The Rolling Stones: Hot Rocks 1964-71* into the CD player and skip to track 4 — Satisfaction —, even though the CD player is much more likely to be in a new BMW than a second-hand Fiat 500. It is obvious that the status of rock music has changed along with the social and generational position of many of those who liked the Stones and who could not afford even the cheapest of cars in 1966. Back then, however, the Rolling Stones were regarded as the epitome of pop oppositionality. Even though I may have been aware of risks of 'officialising pop' (see pp. 22, 24), there were very few of us who would have expected then that, by the end of the 1980s and partially through our own laudable efforts to have popular music taken seriously, a rock canon would have been established alongside those of jazz and classical music.<sup>9</sup>

A more serious problem with this old text of mine concerns its introduction. Drawing on Pieper (1953), Galbraith (1958) and Veblen (1953), I express the opinion (in 1966) that a radical overhaul of music education is necessary *because there is a constant increase in the amount of leisure time at the disposal of the average citizen of the Western world and that improved music education will improve the quality of that leisure time*. Although the latter part of this opinion holds good today — better music education can hardly be detrimental to anyone at any time —, there are clear problems with the first part of the opinion, simply *because many of us who work full time in 2001 have less, not more, leisure time* than those who worked in similar jobs in 1966.

Despite thirty-five years of hindsight, it was in 1966 far from unreasonable to predict that technological advances would have an emancipatory effect. After all, such advances had already, and have since, made it unnecessary to have so many people engaged in dangerous and repetitive manual work. Not only has automation meant that one worker can now operate an entire production process which demanded the labour of tens or hundreds of workers in the 1960s: the digital revolution has also led to the disappearance of thousands of routine jobs in offices. Emancipated from repetitive and menial chores, people could have been released into meaningful employment in the sports and arts, or in our health, transport and education services. Moreover, with the same amount of goods and services being produced by less people, enough resources could have been liberated to enable every one of us to pursue knowledge and happiness in our lives instead of being constantly forced to compete with each other for the dubious privilege of selling our labour. It may appear naive from today's horizon, but this was no pie-in-the-sky utopia: in 1966 I would have found it utterly illogical to predict that ongoing technological advances would be accompanied by the drastic cuts in arts funding, by the dismantling of public services, by the increased alienation of labour, and by the deterioration in the standard of living which have inflicted all but a minuscule minority of the population in this part of the world, not to mention the even more rapidly increasing inequality between that tiny minority and almost all people in the developing nations.

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9. For critique of rock canonisation, see P Tagg: *Popular Music Studies versus the 'Other'* [[www.tagg.org/articles/cascais.html](http://www.tagg.org/articles/cascais.html)] and *Open Letter about 'Black' Music* [[www.tagg.org/articles/opelet.html](http://www.tagg.org/articles/opelet.html)].

Indeed, one of the most obvious self-indictments of capitalism is that it has demonstrably used technological advances not to liberate humanity but to enslave us. More product, more services and more profit are extracted from each worker; levels of stress have increased markedly and bureaucratic mechanisms of achievement quantification have been established to control and pervert our labour. Levels of exploitation have increased in direct relation to the outrageous accumulation of obscene amounts of money in the hands of a minuscule minority. Those made redundant by technology and corporate greed have been thrown on to the scrap heap of unemployment, hounded by inhumane legislation into a state of unwarranted shame. Together with many of today's young, they are disempowered and excluded, both socially and financially, objectively and subjectively, from exercising any real control over their own lives. This new 'leisure time' constitutes a pauper's prison for a new lumpenproletariat, not the emancipation from menial chores which technology, if organised in the interests of all the planet rather than of the greedy few, still has the potential to deliver. Under these circumstances, how, you may well ask, can Tagg's text from 1966 have any relevance today, given that its call for the radical reorientation of music education was based on the assumption that we would all be enjoying much more leisure time?

The text has, I think, relevance to today's situation in two ways. Firstly, by predicting the logical, emancipatory outcome of technological progress it highlights the inherently illogical, inhuman and destructive processes of capitalism. The difference between what was both reasonable and logical in the mind of a young man studying in Manchester in the mid 1960s and, on the other hand, the managerial mayhem of today's Britain is, to put it mildly, striking. The fact that it is necessary to account for this contradiction is in itself instructive: it emphasises the need to analyse the workings of capitalism in relation to education and to the production of ideas with much greater rigour than I was able to muster in 1966.

The second way in which the 1966 text is relevant today concerns such statements as:

... "it will be necessary to find that musical language which is most common to the majority of the pupils' experience"...  
(p.8)

... "would it not be better to give [pupils] practical experience of the music they are at home with before trying to base an empty response to classical music on no practical participation at all?" (p.25)

These statements share the common educational assumption that the motivation to learn is greatest if that learning is rooted in the pupils' own experience. This assumption implies in turn that the pupil's own experience and subjectivity are not only valid but also the *only* viable starting points for the lasting appropriation of skills and knowledge. Moreover, the statements assume that learning based on these precepts constitutes an emancipatory process because the mediation of shared experiences, through music or other means, enhances the expressive powers of all pupils involved in the process, arming them with the ability to communicate ideas and experiences from their own life on their own conditions, as seen and heard through their own eyes and ears. This process of learning also helps counteract consumerist brainwashing from advertisers, music business mavericks and others

who exert undemocratic financial control over the mass-mediation of ideas and attitudes.

It is in this light also worth considering the following observation from 1966.

... "not only do teenagers have an interest in their own music: the whole pop business is also a matter of national economic importance." (p.13)

Tension between the emancipatory and commercial potential of pop music is latent in this statement, as well as in some of the survey questions.<sup>10</sup> This tension, a recurrent theme in popular music studies, has today more the character of an outright contradiction between the expressive aspirations of most people involved in music and the brave new accountancy of the pop business. Under these circumstances, and with the equally brave new injustice of global capitalism destroying the planet and oppressing the vast majority of its inhabitants, the need for people to express their own views and aspirations is stronger than ever before.

I would like to think of the Manchester text as an early, if rather faint and sometimes confused, call for the democratisation of music education. After all, it at least tried to do the following:

- argue for the inclusion of popular music as a serious part of public education;
- advocate a plurality of genres to be covered in music education;
- view both popular and classical music on equal terms as social phenomena;
- raise problems of notation in relation to popular music;
- register a tension between the emancipatory and commercial potential of pop music;
- warn about the possible disadvantages of institutionalising popular music;
- raise the issue of and provide empirical documentation for relations between peer group identity and musical aspects of pop.

It is my hope that the text which now follows will at least be of interest to anyone who wants to understand the history of popular music studies. If not, this exposé of embarrassing details about my intellectual past will have been in vain!

Liverpool, April-May 2001.

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10. See Appendix 2, section B, p. 28

## ***Pop Music as a Possible Medium in Secondary Education***

Philip Tagg (Dip. Ed., Manchester, 1966)

### ***Introduction***

Western civilisation is at the moment experiencing probably one of the greatest upheavals in its history. This upheaval, due to technological advances and a consequent increase in the average person's leisure time, requires a complete reorientation on the part of all those involved in education, especially those concerned in educating for leisure, namely artists, musicians, etc. It is with this in mind that this essay attempts to assess the possibilities of the use of popular music (hereafter referred to as pop music)<sup>11</sup> in secondary school education.

"As the production of goods comes to seem less urgent, and as the individuals are less urgently in need of income for the purchase of goods, they will work fewer hours or days in the week. Or they will work less hard. Or, as a final possibility, it will be that fewer people will work all the time."<sup>12</sup>

Over the last century, there has been a drastic decline in the length of the working week. In 1850 it is estimated that the working week averaged just under 70 hours, equivalent to six days working six in the morning until six at night whereas six years ago the average working week in the USA was calculated to be 38.8 hours.<sup>13</sup>

The effect of this decline in the length of the working week is apparent: since greater time is being spent in leisure activities, the greater is the need for effective education for leisure. However, the major emphasis in education today is on scientific subjects, this being both natural and laudable, but in obtaining the necessary academic qualifications for a better paid job (and consequently a job with greater leisure-time potential) this ultimate goal (leisure time) is overlooked: instead of being able to lead a fuller life the person in question may risk finding this duly won leisure empty, a bore.

It is on children of average academic level that our attentions will be centred, for it is they who will be most liable the soonest to receive even more cuts in the working week, as it is the kind of jobs for which they are currently being ed-

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11. In this essay I anglocentrically equated *popular music* with *pop music*. Since the 1970s, however, I have tried consistently to distinguish between the two. *Pop music* is defined for the purposes of this essay on page 11, ff., *popular music* in P Tagg: *Kojak - 50 Seconds of TV Music* (MMMSF, New York, 2000, pp. 29-38).

12. See [1] J K Galbraith: *The Affluent Society*. London: Pelican, p. 269; [2] Joseph Pieper: *Leisure, the Basis of Culture*; London: Faber, 1953.

13. See J F Dewhurst: *America's Needs and Resources* (1958), p. 1053.

ucated which, by being more easily automated, will disappear the soonest. As far as music is concerned, with its very small coefficient of correlation with intelligence (as measured in IQ tests), the problem of using music education as a means to help overcome the problem is not as insurmountable as might appear at first sight.

However, there are many complications which must be discussed before any definite ideas can be put forward about how music education for the new leisure time might be developed. The greatest complication is the diversity of musical languages which are current, and it will be necessary to find that musical language which is most common to the majority of the pupils' experience.

If we review some of the different styles or languages around us, we may be able to discover that combination which is most appropriate. Firstly, there is the standard classical music language based on tertial<sup>14</sup> harmony and on formal concepts such as sonata form; however, although it would obviously be undesirable to exclude this tradition from music education, especially from the historical viewpoint as it is the antecedent of much music produced today, it is unfortunately associated with social stigma. No longer is classical music solely accepted for what it is or what it was intended to be, but has become an outward sign of social distinction,<sup>15</sup> of belonging to a 'better' class, or at least a more intellectual one. A visit to a classical music concert or, even better, to the opera in this country will confirm the impression that most of the consumer group for this kind of music are of upper middle-class background, or are at least trying to acquire the trappings of that class, or that they are members of the intelligentsia. It should be added that these observations derive from impressions gathered through subjective experience and that they cannot be backed up by any figures. However, it has been the case that it is members of the social groups just mentioned who determine education and who have been the major cultural influencers in the past.<sup>16</sup> It is for this reason that classical music has been so prevalent in the musical education of social groups for whom 'The Classics' are not an inherent part of their cultural experience.

Similar arguments and criticism could be applicable to the use of most modern classical music. In many cases the social aspect of being a devotee of contemporary music is even more extreme than that of a classical music fan. Nevertheless, a good deal of modern music by the less *recherché* composers (e.g. Bartók, Britten, Hindemith, Stravinsky) presents real

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14. I wrote originally 'triadic'. For explanation of differences between *triadic* and *tertial*, see [www.tagg.org/articles/ptgloss.html](http://www.tagg.org/articles/ptgloss.html) and [www.tagg.org/teaching/harmomyhandout.pdf](http://www.tagg.org/teaching/harmomyhandout.pdf).

15. Michael Young: *The Rise of the Meritocracy*; London, Pelican.

16. Thorstein Veblen: *The Theory of the Leisure Class*, New York, Mentor, 1953.

potential for educational use in practical work as well as in listening. Moreover, the musical language of these composers has, on the surface at any rate, much in common with a large amount of soundtrack music to films and television productions, and as the latter are occasions in the experience of all sorts of people, the transfer from the average person's musical experience to that of the modern composers cited above would appear to be less than the transfer to the language of the European classics. Also, modern music sometimes has (admittedly tenuous) harmonic similarities with certain types of pop (notably music with blues influences, and certain records with an above average originality of harmony),<sup>17</sup> basing itself on a general kind of tonality, not necessarily tertial,<sup>18</sup> and, in the latter case, the use of fourths and fifths without the mediant.<sup>19</sup>

In some countries (notably Poland) jazz is regarded as an intrinsic part of the musical education of experts as well as of children at school.<sup>20</sup> Schools of jazz are financed by the state in Poland and enjoy the advantage of being approved by authority and by young people who buy records by such groups as the Polish Modern Jazz Quartet. However, jazz in Britain enjoys neither of these advantages and suffers from the social image of being an area of cultural appreciation reserved for modern (probably bearded, probably socialist) intellectuals, an image with which the majority of secondary school children may not wish to identify. Thus, although much jazz is of considerable value, it is also a foreign musical language to the group we are considering. This is also a great pity, as the most effective use could be made of jazz improvisation in education, that is assuming that the pupils were given sufficiently simple chord sequences. However, in the last year or so, more and more pop songs with a jazz influence have come on to the market,<sup>21</sup> many containing examples of jazz-style improvisation<sup>22</sup> or even improvisation in the Indian style.<sup>23</sup> If this trend were to continue it would be possible to include chordal improvisation in a plan for music lessons based on music in the secondary school child's experience.

Before we review the place of pop music in a possible plan for music education in secondary schools, a comparison between the socio-musical situation of today and that of the past will help to establish the complicated nature of the problem which faces us. Within one society in musical history it seems im-

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17. For example, LPs *The Animals* (Nov. 1964) and *Animal Tracks* (Columbia 1965).

18. See footnote 14 p.8.

19. i.e. quartal harmony (see [www.tagg.org/teaching/harmomyhandout.pdf](http://www.tagg.org/teaching/harmomyhandout.pdf)). See, for example Carole King's *Road To Nowhere* (London, April 1966).

20. Information on Polish Modern Jazz Quartet LP sleeve (Decca).

21. For example, Manfred Mann's *I'm Your Kingpin* (HMV, March 1964).

22. For example, *I Put A Spell On You* by The Alan Price Set (Decca, March 1966).

23. For example, *Shapes of Things* by The Yardbirds (Decca, February 1966).

possible to find a time when there was simultaneous access to so many different styles of music as there is today. It would be a considerable anomaly to find a Purcell today, writing music for Westminster Abbey as well as composing bawdy drinking songs to be performed in pubs; or to find a Mozart, composer of 'serious' music, turning his hand with equal dexterity to write a pop song.<sup>24</sup> In other words, one musical language tended to be used for long, 'serious' works as well as for song and music of a more apparently 'frivolous' nature. An even greater similarity of musical language can be seen in the works of the English Tudor composers. For example, many anthems written were also available as madrigals<sup>25</sup> and vice-versa.

Although social divisions in the sixteenth to nineteenth centuries may have been greater in terms of material wealth and amount of leisure time than they are today, those differences were also of a different nature altogether. As far as music was concerned, it was quite acceptable for composers to the leisured classes (i.e. most composers of 'classical' music) to borrow and use folk music (in the sense of music belonging to the people) in their own compositions.<sup>26</sup> The *Beggars' Opera* is also an example of popular tunes used at first for an aristocratic audience. The comparison between today's socio-musical groups and those of the past lie not in the music itself, then, but in the nature of the social groups themselves; in eighteenth-century England, for example, the difference between the aristocracy and the lower classes was mainly one of material wealth and of birth, whereas today differences in meritocracy are determined by nature of job, academic qualification, as well as by material wealth. Music also plays a large part in this kind of class distinction in much the same way as the ownership of certain types of car. It would be a tremendous anomaly to find a bank manager liking the Rolling Stones in the same way as it would be incongruous to see him driving a £275 Ford Popular.

In summary thus far, then, it is essential to realise that if we are to find effective means of music education in secondary schools, the diversity of musical languages prevalent today, brought about and perpetuated by intellectual prowess and taste must be borne in mind. In the discussion of pop music which follows, the social implications will be considered first.

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24. For example, Purcell's anthem *Hear My Prayer* (Westminster Abbey) and *Non più andrai*, from Mozart's *Marriage of Figaro* (pop song).

25. For example, *Holy, Holy, Holy* as sung by the choir of Magdalen College Oxford on LP Thomas Tomkins (Argo), or as available, with secular words, from Stainer and Bell (London).

26. For example, Byrd's arrangement of *Jhon Come Kisse Mee* (Fitzwilliam Virginal Book). The famous slow movement from Haydn's *Emperor Quartet*, also used as the Austrian national anthem (and, ignominiously, as the Nazis' *Deutschland über alles*), is based on a Slovenian folk tune according to H F Redlich's biography *Joseph Haydn*.

### **What is pop music?**

Before discussing the educational possibilities of pop music it will be necessary to understand its *raison d'être* from the social as well as musical standpoint. But first let us define the term 'pop music'.

A pop song or pop track is essentially any piece of music of approximately three minutes' duration, usually issued as a 45 rpm single, or on an extended play disc, or on an LP. It is usually produced commercially, going through the following process of publication and dissemination: once the song has been recorded on a demo-disc, copies are sent to publishers, radio and television stations, and the record company makes a contract (if the artist(s) concerned are not already under contract to another company). Then there follows the repeated playing of the hit song by radio disc-jockeys, notably at the pirate radio stations. This is the way a disc is publicised<sup>27</sup> and it is worth noting that a record reaches on average its highest position in the hit parade approximately two weeks sooner on the pirate radio charts than in the national charts, which are now based on record sales.

"It is very easy to point to intellectual laziness as one of the cases and manifestations of bad taste, and then to reproach the youthful customer for preferring rock 'n' roll to the waltz or even to the classical repertoire. But it takes more trouble to realise that taste as a social phenomenon of behaviour is brought about by a social process, namely by that of a functional interaction."<sup>28</sup>

It is intended to take this attitude in answering the question "why is pop popular?", for only if these social considerations are discussed can we reach any conclusion about the use of pop music in education. The question can best be answered by analysing the occasions when pop music is consumed and then, in turn, by whom and why.

Although there is little evidence to say to what extent the following is true, it could probably be stated that the most frequent conditions encountered when pop music is listened to are when the people need something to fill the silence, i.e. when they are working, reading, getting dressed, doing household chores, etc. Why is there a need for music in these situations? Silbermann,<sup>29</sup> dealing with behavioural tendencies in socio-musical groups suggests that loneliness and silence are overcome, almost therapeutically, with the aid of music. Perhaps it could be added that they prefer music with which they

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27. Adapted for today's conditions from D MacDougald: *Radio Research* (USA), p. 65, ff.

28. Alphons Silbermann: *The Sociology of Music*, translated from *Wovon lebt die Musik?* (Gustave Bosse Verlag, Cologne 1957). Routledge and Kegan Paul, London, 1963.

29. Op. cit., passim.

feel at home. Silbermann adds that "the silence of loneliness must be filled in with musical background noises", underlining that this "is the motive for the behaviour of a large number of listeners in the consumption of the musical experience". It is easy to condemn out of hand such 'desecration' of the art of music, but the apprehension which surrounds the angst of modern life results in fear of silence.

"The substitute experience is intended to replace the silence and loneliness, the fear, apprehension and banality of everyday life with the least possible amount of effort".<sup>30</sup>

Presumably, as leisure time increases, so will the fear of loneliness and silence. In involving ourselves in a constant stream of pop music broadcast twenty-four hours a day by the pirate radio stations which, incidentally cover nearly three quarters of the population of England,<sup>31</sup> the "substitute experience" has become an ever-present reality. On these radio stations' programmes, whose social importance should not be overlooked, the disc-jockeys give the impression that they are 'getting through the day' in a happy, slick mixture of euphoria and bonhomie. As listeners we are presumably supposed to identify with this process and feel that we too are defeating our basic loneliness and sense of purposelessness, if only by evasion or by substituting real experience with mass-mediated sonic padding.

It could be said that the above applies equally to older people as to children of secondary school age. Indeed, but the pirate radio stations (which cover, as well as England, Southern Sweden, Denmark, Northern Germany and the Netherlands) and the commercial transmitters (covering the USA, France, Southern Germany, Switzerland and Northern Italy - all centres of affluent society and culture) are mostly listened to by young people, including teenagers, the age group which concerns us for the purposes of this study. This stream of pop is available through the purchase of a transistor radio - standard equipment for an affluent teenager. In fact, it is the socio-economic position of the teenager which to a large extent has been responsible for the existence and consequent popularity of pop music. It is only since the war, or rather only in the past five years that teenagers in this country at any rate, have been viable potential on the consumer market. Indeed, without the financial support of the millions of teenagers who buy pop records, the record companies would not be able to subsidise and produce at such low cost LPs of classical works or other minority musical interests, a sobering thought for those who condemn interest in pop as intellectual backwardness of aesthetic anathema. Whereas in the twenties a teenager had

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30.Op. cit., p. 188.

31.One of these stations - Radio London, 266 medium wave - claims more listeners than all three BBC radio channels put together.

few more possessions than a change of clothing, the average teenager of middle-class background today possesses a collection of records, a transistor radio and possibly a gramophone as well.<sup>32</sup> Such teenagers can subscribe to magazines (usually covering some aspect of the pop scene) and can invest in such commodities as Beatles wallpaper. In fact, Northern Music (and associated companies) are at present one of the country's most important export firms and it is estimated that in the USA alone Beatleware exports earned more than one million dollars.<sup>33</sup>

To the musical ideologue who would change all this and have teenagers from Stockholm to San Francisco abandon the Beatles for Beethoven, the account just presented must seem quite depressing, as not only do teenagers have an interest in their own music: the whole pop business is also a matter of national economic importance.

So far we have only covered individual behaviour (dispelling silence etc.) in relation to pop music as background music. This aspect, as well as that of social behaviour accompanying it, stem from the same root: instead of occupying leisure time in reflection and reorientation (i.e. silence allowing the space to relate to oneself, to the sum of things and to existence in toto), the modern person, especially teenagers in their use of pop music, launch themselves into bouts of hyperactivity, preferring to accelerate their speed of existence rather than shutting it off completely.<sup>34</sup> As stated above, the angst of modern life breeds the will to avoid silence and reflection, as these states are feared because they might result in disillusionment and introversion.

Let us now discuss the consumer group and its relation to pop music. Pirate radio stations, television programmes like Top of the Pops and Ready Steady Go, magazines such as The New Musical Express, Boyfriend, Petticoat and many others are aimed at young people, mostly between the ages of thirteen and eighteen, or at subdivisions of that group. The consumers do not necessarily belong to any particular class (like purchasers of BMC mini cars), and in this respect pop music can be seen as a great leveller: a Beatles LP can be the property of the daughter of a welder or of a senior accountant. Pop groups are just as easily formed at public schools<sup>35</sup> as at a comprehensive. One group in Cambridge, for example, playing once or twice a week, were booked in the same term for the same type of music by the local palais manager, the manager of a youth club, the University Officers' Club annual ball secretary,

32. Information obtained from John R Wakeford, reader in Sociology, University of Cardiff.

33. Report on BBC's *Radio Newsreel*, dealing with the financial year 1964-5.

34. Josef Pieper: *Leisure, The Basis of Culture*. Faber, London, 1953.

35. e.g. The Blue Angels (Harrow), The Ghosts (Oundle), The Chaperones (Leys, Cambridge).

Caius College May Ball Committee, etc., i.e. a wide range of social habitats.<sup>36</sup> There is nevertheless a limiting factor to the pop consumer group as there is to any group within society, and that is one of age. Let us try to find reasons for the fact that it is almost only young people who listen to and who are socially involved in pop.

We will first deal with the physical or auditory aspect of pop music. One of the prerequisites for the performance of pop music at a dance or club is that music should be inherently loud, i.e. loud enough to provoke the clientele into physical participation in the music and to fill the room or hall with noise, so eliminating lack of ease, introversion, etc. Research into this field was carried out in Paris by Silbermann.<sup>37</sup> His purpose was to discover whether the factor of a note was sufficiently strong to exert an effect on the structure of social groups. To this end he visited and, together with a team of assistants, observed the relevant phenomenon in forty-two dance halls in Paris and its environs, from the *bals musettes* in the Rue de Lappe, through the night clubs of the Champs Elysées to the *caves* of St Germain-des-Près. Observation was aided by the fact that a rhythmical as well as physical alliance manifested itself. Without taking into account the reactions of tourists or of mere chance visitors, he established that the dance orchestras preferred by younger people tended towards the utterance of high and loud notes whereas the orchestras preferred by a public of aged thirty and upwards had a tonal range extending from the middle to the lower reaches. He found that the shrillness of hot jazz (very popular at that time) produced in the young audience at St Germain-des-Près animated expressions of feeling while the sober depth, the almost organ-like timbre of the tango orchestra in another dance hall was greeted with enthusiasm by a quite different, more elderly public. Silbermann points out that these reactions must not be regarded as conclusive since rhythmic, emotional, technical and even atmospheric and economic preferences must also be taken into account. Yet the observations do at least indicate how certain similar groups will react in similar ways to similar patterns of musical pitch and dynamics.

Although Silbermann carried out the above research before the advent of beat groups as we know them today, his observations can be applied to the realm of pop music. We have already stated that the music is loud, and that such loudness is an inherent quality of the music. Moreover, the tonal instruments used in pop music – mainly guitars – tend, especially when

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36. The Soulenders (Cambridge): bookings for Summer Term 1965. The author was a member of this group. Details confirmed with Vince Bosworth, Queen's College.

37. Silbermann, op. cit., p. 117, ff.

amplified by magnetic pick-up placed under the strings near the bridge and when plucked with a plectrum, to issue sounds with quite a sharp timbre. Also, the electronic organ, now a widely used instrument in pop groups, tends to produce timbres abundant in higher partials. Moreover, and perhaps this is the most important point in this argument, male pop singers tend to sing within quite a limited range high in the male-voice register, often breaking into falsetto. In an average song by the Beatles, for example, the usual range is from about the *g* below middle *c* to an *a* or *b* over an octave higher.<sup>38</sup> Also, although there are obvious exceptions,<sup>39</sup> many singers in the world of pop have not had – and probably do not wish to have – lessons in voice production, no bel canto schooling or other artificial mellowing of vocal tone by means of tremolo, vibrato or similar techniques. This aspect of vocal timbre, as well as the predominant vowel sounds on important notes which often sound more 'pinched' or 'pushed' than in classical voice production (e.g. 'Yeah'), tends to make pop music fuller of important high frequencies than is the case of music preferred by more elderly people.<sup>40</sup>

"The range of any particular voice or instrument finds its equivalent in the human ear; and although it can be established that there are sounds which escape the human ear, or that as a result of physiological causes, the ear distorts certain sounds and eliminates others,<sup>41</sup> it will be found that in the majority of cases the ear makes a clear distinction between high and low notes and, above all, prefers one to the other. Such preferences may, for one reason or another, be altered during the course of life; for instance, the sensitivity of the ear to high notes has been proved to change considerably with the advent of age."<sup>42</sup>

From the above account we can see that such auditory phenomena may be a factor in limiting the appeal of pop music to young people only. Such factors could partially help explain the popularity of such groups as The Bachelors to older people,<sup>43</sup> whose music and vocal technique is of a more mellow nature than most pop groups', being based on comfortable triads throughout<sup>44</sup> and containing virtually no unresolved or challenging harmonies, no piercing timbres or rough rhythms.

38. The melody of *She Loves You* (Beatles) ranges from *g* below middle *c* to *b* above.

39. The Walker Brothers, The Bachelors, Ken Dodd, etc.

40. See Wood's *The Physics of Music* (Cambridge University Press), especially section of wave form reproduction of vowel sounds.

41. See S S Stevens and H Davis: *Hearing, Its Psychology and Physiology*, New York: Wiley; see also O F Ranke and H Lullies: *Gehör, Stimme, Sprache* (Berlin 1953) and H Stephanie Zur *Psychologie des musikalischen Hörens* (Regensburg 1956).

42. Silbermann, op. cit., p. 119.

43. See questionnaire, question C7.

44. e.g. *Diane* (January 1964), *I Wouldn't Trade You For The World* (August 1964), and others.

### ***The social aspects of pop music***

Sons and daughters rebelling against their elders constitute now more of a new phenomenon than the older generation expressing disgust at the depraved ways of the younger generation. Indeed, in Aristophanes' *Acharnians* (c.450 BC), Athenian war veterans from the battle of Marathon (491 BC) bewail the apathy and sloth of the city's young people. What Aristophanes would have made of today's youth and pop music is anybody's guess. Pop music, or rather the aura and mystique surrounding pop music and culture is a convenient vehicle in which young people can manifest their emotional independence from their parents. But it is more than that: it is also, to some extent, a rebellion against the comfort and shelter of home, an auditory sign of transition from the conformity and acceptance of parental influence to the conformity and acceptance of the peer group – a very important process in anyone's social development. This transfer from parental dependence to independence happens in almost every kind of society and we can be grateful that in Western civilisation this transfer occurs in such a comparatively innocuous form! The social group of pop enthusiasts (the majority of English teenagers) has, like any other social group, its own behaviour patterns and mores. A rejection of these behaviour patterns, for example within a school, imply usually a social, if not personal, rejection of the individual concerned. For example, it was observed in a boys' grammar school<sup>45</sup> that a hard core of four ardent [classical] concert-goers and sport-avoiders hardly ever mixed with their contemporaries and were regarded as unacceptably 'wet'; with the exception of one of the four, who played the guitar and had a large selection of pop records, they invariably sat on their own during dinner and were scarcely even approached or talked to by their form mates. Similarly, there tends to be suspicion of anyone sitting on the fence: since appearing on television in Meeting Point with the Archbishop of York, Adam Faith has, in the past three years only had one hit record, compared with four hits in the two years prior to the interview. Admittedly, this decline in popularity may well be due to other factors but the interview gained a great deal of publicity and should not be overlooked. Moreover, Cliff Richard, who became well-known at around the same time as Adam Faith and who has not yet tried to act as liaison officer between teenagers and 'oldies', has lost little popularity over the same period. A lover of classical music who is also a pop music enthusiast is regarded by both socio-musical groups with suspicion, almost as a traitor. Such general exclusivity of taste puts the music teacher who might wish to use pop music in school into a difficult position as it is not impossible that the pupils might feel cheated in some way by the teacher's

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45. Central Grammar School, Kirkmanshulme Lane, Manchester.

unintentional impression of duplicity.

It seems, however, that the main stumbling block to the use of pop in music education would be the interdependence of pop culture and 'with-it-ness'.<sup>46</sup> In the questionnaire, discussed later, it was found that there was considerable correlation (+0.375) between identification with the pop mentality on the one hand (Section B) and, on the other, the ability to listen to pop in a discerning manner (Section C). As has been observed already, one of the functions of pop music seems to be a negative one, namely the filling of silence and the dispelling of loneliness, hence also the dispelling of reflection and critical listening. As will be seen, quite a reasonable degree of discrimination was found in the results of the survey, but it is surprising when one examines the way pop music is presented, for example on radio and television. The merits of a disc are determined by the majority of disc-jockeys by the disc's position in the hit parade; and even on a programme ostensibly designed for criticism, *Juke Box Jury*,<sup>47</sup> the jury almost inevitably discuss the music as 'potential hit material' rather than give their opinions about its musical merit. Such opinions do, however, occur, notably when pop musicians or arrangers are included on the jury.<sup>48</sup> Otherwise on radio and television, material of musical interest is mixed with that of little interest and songs are introduced as mere positions in the charts in musical anonymity. On a programme such as *Ready Steady Go!* the connection between pop music itself and pop fashion, its mentality and sexual façade can be seen. The compere is a twenty-year-old girl who dresses each week in some new fashion; she introduces artists with the customary mixture of 'chumminess' and adulation. During the programme some of the artists discuss their forthcoming trips or latest releases, but they never comment upon their music, as if such comments would hold not interest at all for the viewing public. Considering the large number of amateur groups playing in this country at the moment, it would seem that there is a large enough minority to warrant at least some comments on the music. However, the mixture of ritualistic social behaviour and music can best be seen in camera techniques used on *Ready Steady Go!* There are very few long shots or panning shots, because the camera seems mostly to concentrate on close-ups of singers' faces, taken sometimes from below the stage and looking upwards at them as if at a kind of mobile statue, using quick camera switches for brief cuts of the writhing limbs of

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46. See questionnaire, section B, introduction. 'With-it' and 'switched on' were two adjectival expressions used in the mid sixties to qualify people or behaviour considered by followers of youth-orientated pop culture to be consistent with current fads and fashions inside that culture.

47. BBC TV [1], Saturdays 5.15 p.m.

48. e.g. Manfred Mann (16 April 1966) and Ray Davis (of the Kinks, 23 March, 1966).

the studio audience dancing (usually females in tight jeans or short skirts) to cut across to the swaying figures of the musicians, and so on. Also in this programme there is usually a space of around five minutes devoted entirely to dancing, usually in the form of an improvised kind of shake highlighting distinctly sexual movements.

Perhaps the nature of collective ritual as regards pop music will be understood better if we compare it very shortly with collective behaviour in the consumption of classical music.

"There follows the normal succession of events: changing clothes, buying tickets, entering the hall, buying programmes, greeting acquaintances, being shown one's place, taking a look round the hall, at the organ gallery and at the arrangement of the platform, etc. When the lights of the auditorium have been dimmed, one watches the ceremonial entry of the orchestra, the leader, the conductor and the soloist, Then, when the music begins, the individual is free to choose whether to receive the musical experience both audibly and visually, or to close his eyes."<sup>49</sup>

Silbermann points out, however, that the above are all elements which have greater psychological than sociological importance. Nevertheless, 'crises' of the concert hall do occur when the audience becomes involved in social-group reaction. The main social aspect of concert or opera visits, however, is the meeting of friends during the interval or after the performance. On such occasions certain standard procedures of behaviour and conversation are observed. One takes it for granted that one's fellow listeners are interested in the music, otherwise they would not have bothered to buy a ticket; therefore one discusses the music, the performance. Other times one has heard the music before, possibly a recording of the work concerned, and this is all usually discussed over a drink or coffee.

Collective behaviour at a beat club would, on the other hand, be more likely to take the following form. There is, as with going to a classical concert, the changing of clothes, entering the club, buying a ticket, a drink, taking a look at the place, the group, the people there, greeting acquaintances, imbibing the atmosphere, striking new acquaintances, and following certain conversational and behavioural procedures. In a beat club for the 13-18 age group (hence not able to be licensed), the standard drink would probably be Coca Cola or some similar soft drink<sup>50</sup> rather than the wine, spirits or coffee consumed by classical concert-goers. However, it is common knowledge that mass reaction at pop events is not unusual, es-

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49. Silbermann, op. cit. no page ref. given.

50. Based on observations at the Flamingo and Marquee clubs, Wardour Street, London (1965); also at The Twisted Wheel and Beat City Clubs in Manchester (1965-66).

pecially when a well-known group is performing. Such mass reaction is usually harmless, for example dancing, shouting, screaming from the girls,<sup>51</sup> only occasionally descending into obscenity,<sup>52</sup> violence (e.g. the slashing of seats),<sup>53</sup> street fights,<sup>54</sup> trouble with the police,<sup>55</sup> or even mass hysteria and fainting.<sup>56</sup>

### **Pop as a possible medium in secondary education**

Having reviewed some of the social, economic and, to a lesser extent, psychological aspects of pop music, we are in a better position to discuss its potential as a possible medium in music education in secondary schools. We have already discussed the social ubiquity of pop among teenagers today, and we have also reviewed the apparent enthusiasm, bordering on the fanatic, of the same group towards the heroes of the pop world. The argument here is: if there is so much interest in pop music both from the passive and active point of view (it is estimated that there is approximately one pop group, amateur or professional, to every 3,000 of the population of England), and if pop music transcends the social barriers within the age group with which we are concerned, why do music educationalists continue to ignore it as a possible source of help in the teaching of music?

The factor of difference in age would seem to be a limiting aspect of the possibility for older teachers to use the music in secondary education; but it is doubtful whether it would be necessary, if teachers were merely concerned, say, with the teaching of notation, for them to present some 'young' image. In fact it is more for the practical reason of pop's familiarity to pupils that it should be used, not to generate artificial enthusiasm.

To help establish a statistically based understanding of the educational aspect of pop music, a questionnaire was designed (Appendix 2). There were in fact two separate questionnaires, the first of which was given to 131 first, second and third-formers in a boys' Grammar School.<sup>57</sup> This questionnaire was divided into two parts. Only the questions whose numbers are underlined were given in the first test, and the two sections concerned were 'A' (to assess the family musical background, and the amount of tertial<sup>58</sup> harmonies and classical notions in

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51. There is a distinct lack of information as to causes of this phenomenon.

52. Örebro Folkets Park after appearance by Swedish pop group Shanes. For details, see *Aftonbladet*, July 1965 [no date given].

53. Kurzaal, Scheveningen (Netherlands), after appearance by The Rolling Stones.

54. Gothenburg, Sweden, after similar appearance by The Rolling Stones.

55. Paris, Spring 1964, after appearance of The Beatles.

56. Beatles at Shea Stadium, New York, August 1965.

57. Central Grammar School, Kirkmanshulme Lane, Manchester.

58. 'Tertial' replaces the original's 'triadic' for reasons presented in *Tagg's Harmony Handout* (2000), see [www.tagg.org/teaching/harmonyhandout.pdf](http://www.tagg.org/teaching/harmonyhandout.pdf).

the child's experience) and a combination of sections 'B' (to assess the subjects' extent of identification with pop culture) and 'C' (to assess critical listening abilities within the language of pop music). The coefficient of correlation between the two main categories (between 'A' and 'B'+ 'C') was found to be -0.271, which would tend to show that a boy with a lot of tertially based music in his experience would be less interested in pop music on the whole than a boy who had less experience of classical music, although the coefficient is too small to show anything more than a slight trend.<sup>59</sup> It was further discovered that boys from class three housing (i.e. urban centres of dense population of the old kind, terrace-row streets, etc.) tended to have high scores on sections B and C, whereas boys from class two dwellings (council estates, owner-occupied houses) tended to score higher on section A and lower on sections B and C.<sup>60</sup>

It could be interpreted from the above that interest in pop, which appears more prevalent amongst boys from class three dwellings, acts in some cases as a substitute for the lack of music going on in the home. However, this interpretation is purely hypothetical.

As can be seen in appendix 2, the questionnaire was extended, many questions being changed or regrouped, when it was given to 213 children in a mixed comprehensive school.<sup>61</sup> Details of the questionnaire, all the questions, the markings, etc. appear as appendix 2. Individual marks for each section obtained by each pupil in each form are tabulated in appendix 3. In the test given to the comprehensive school pupils sections B and C were treated separately and the correlation coefficients were found to be as follows:

$$r \text{ A:B } -0.16; r \text{ A:C } -0.04; r \text{ B:C } +0.375$$

Firstly let us consider the relation between sections A and B. The maximum available mark for section A would be 47 [100%], and this would mean that the person concerned would be extremely knowledgeable about and well-versed in the music and theory of music of the classical sort. The average mark for section A, however, was about 20 [48%]. The maximum mark for section B was 73 [100%] but here the average mark was proportionately much higher: around 50 [69%].<sup>62</sup> These figures sug-

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59. Correlation coefficient calculated (N=213) according to the formula

$$r = \frac{\frac{\sum xy}{N} - (\bar{x} \cdot \bar{y})}{\sigma_x \cdot \sigma_y}$$

60. The loss of the scattergram visualising these figures is not important since it showed no more than the slight trend described in the main body of text. Only two boys came from class 1 housing.

61. Plant Hill Comprehensive School, Manchester.

62. The test was also given to a 15-year-old music scholar at a public school who gained 37 [79%] on section A but only 24 [33%] on section B.

gest that children at the comprehensive school in question are on the whole reasonably 'with it' (section B) but do not have in much experience or knowledge of the classical tradition (section A). However, as the coefficient of correlation is so insignificant (-0.16) it is fair to say that on the whole greater scores on section A (more experience of classical music) do not effect scores on section B (how 'with it' the subject is) or vice versa. This trend would confirm the theory already put forward that social or even musical background plays little part in the teenager's general attitude to pop culture.

Much the same conclusions can be drawn from the relation between section A (classical familiarity etc.) and section C (critical listening ability within the musical language of pop, knowledge about instruments involved, recognition of styles, etc.). The correlation coefficient for A:C (-0.04) was even less significant than that for A:B: there is no trend either one way or the other between these two factors. We can therefore state with some degree of safety that a child of secondary school age with a large amount of music going on at home is not necessarily better equipped to discriminate within the musical language of pop, just as the reverse is not true either. In fact, these two categories (those defined by questions in section A and section C) are apparently independent entities and do not influence each other.

However, there *is* a considerable correlation between sections B and C (+0.375). With so high a number of subjects as 213 we can presume with reasonable certainty that a sufficiently large cross-section of types have been taken into account to avoid random correlations or other such chance phenomena.<sup>63</sup> We can therefore say that the figures tend to show that if a child of secondary school age is reasonably 'with it', then he or she would be more likely than someone less 'with it' to be able to listen to pop critically, to recognise instrument timbres or the effects of backing tracks, to cite the most characteristic traits of a pop group etc. This is presumably because if a boy or girl of this age is enthusiastic enough about the aura and mystique of pop s/he will, through hearing the music sufficiently frequently, be able to exercise a certain amount of discrimination or comment upon the music itself. In fact, the 'C' section scores of the fourth year girls' form (see Appendix 3a, p. 31, ff.) together with that of the third year 'a' and 'b' streams (p. 31), both in comparison with the same section's scores obtained by the first year 'a' stream or the third year 'f' stream, would seem to show that there may be some relation between age or intelligence and a high score in section 'C'. On the other hand, with the exception of the first year 'a' stream, scores on section 'B' are

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63. See Loveday: *Elementary Statistics* (Cambridge University Press).

reasonably consistent for all the forms and ages tested.

For the purposes of brevity, and in summary of the questionnaire results, then, we can say the following:

1. A child's musical family background does not seem to affect either his/her keenness in pop or his/her ability to listen critically within the terms of reference of pop music.
2. A child's ability to listen discerningly within the terms of reference of pop music tends to mean that that child is also well versed in pop culture and in the social behaviour and attitudes of his/her peer group.
3. There is possibly a small correlation between intelligence and ability to listen critically within the terms of reference of pop music.

Having thus far reviewed most of the possible social, economic, behaviourist etc. tendencies and implications of pop music, we are in a position to discuss the possible educational uses of the medium for the 13-18 age group.

The primary advantage is of course the enthusiasm of secondary school children (or at least the majority) towards pop music: the amount of amateur groups flourishing in the country is testimony to this fact. It is interesting to note that, since the advent of the LP and of 45 rpm records, amateur classical music-making has on the other hand slumped. Also important to bear in mind is that since 1954, when 35% of American orchestral musicians turned from music to other professions, the number of full-time orchestral musicians has been declining ever since in the USA.<sup>64</sup> If there exists such a tremendous will to play pop music in the UK in 1966 it would seem practical to channel this interest for the teaching of various techniques that will be discussed shortly. However, it is not inconceivable that the 'officialisation' of pop music by putting it on the side of the establishment might go against one of its most important *raison d'être*, namely as one of the necessary social formulae for rebellion *against* the establishment. If this were true, teaching pop music in school might even manage to dampen the will to play the music at all.

However, it is not intended to put forward pop music as the only kind of music to be taught in schools. It is merely thought to be perhaps the only means of communication between the trained musician and the class s/he hopes to teach. Pop music should also be regarded more as a starting point, in the hope that, once musical contact has been made through first-hand experience with the music, the class can extend their knowledge to the diverse kinds of musical language in circu-

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64. 'The American Federation of Musicians had in all 256,000 members in 1956, and every month less work was available.' From 'The National Crisis for Liver Music and Musicians'. Quoted from *Time*, New York, 7 May, 1956, p. 52 by Silbermann, *op. cit.*, p. 158.

lation today. There are still practical ways in which pop could be used without drastically changing music teaching. For example, knowledge of basic harmony could be introduced, assuming the class were equipped with guitars or similar aids, by the studying of simple three-chord (tonic, subdominant, dominant) melodies, etc.<sup>65</sup> This kind of work has already been successfully tried on the BBC music series for secondary schools, broadcast last winter.<sup>66</sup>

There would be great difficulties, however, in trying to teach notation from the majority of pop music as the rhythms used are of course totally dissimilar to those in classical music which classical notation is designed to fit. There would be difficulty in analysing the exact length of notes in pop music, the majority of which are tied or syncopated. However, to presume that pop music must be written down in the standard way is to misunderstand the nature of the music. Assuming, for example, it was the idea with small groups in a class which had covered elementary chords on the guitar to put some words to music, this could quite easily be done by writing the names and figures of the requisite chord below or above the word or syllable where the chord changes. Since popular music is not designed to be 'of eternal quality', riffs (recurring instrumental motifs or ostinati) can be worked out and need not be written down.

Another small and obvious use of pop music is in explaining theoretical points. For example, to save a great amount of time in explaining the elements of ternary form, it would be merely necessary to point to a current pop tune in ternary form<sup>67</sup> and to ask the class at what words in the song sections A and B start (or recur) respectively. Pop tunes could also be used in analysing intervals. For example, in one song there may be the interval of a fourth between two syllables; by citing more examples, pupils would soon understand the concept of intervals and be able to cite examples of particular intervals themselves.

A criticism often levelled against pop music is its aesthetic poverty. This, frankly, is a matter of opinion, and is usually expressed by people who do not wish, mostly for social reasons, to accord pop any value of its own. It is not intended here to go into the analysis of certain pop records to prove examples of rhythmic or harmonic sophistication, or of insight into word setting. Nevertheless, there is one point worth bearing in mind at this juncture. If a group maintains its popularity for more than approximately six months, one can

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65. Such songs are legion, not least in R&B (see recordings by The Animals, John Mayall and the Bluesbreakers, etc.).

66. BBC TV [1], winter term series, introduced by Steve Benbow.

67. At the time of writing there are many. For example, the current hit parade includes *You Don't Have To Say You Love Me*, sung by Dusty Springfield.

usually detect a greater degree of rhythmic and harmonic sophistication creeping into their work. This trend is most easily seen in the set of LPs recorded by the Beatles over a period of three years. In the first one,<sup>68</sup> only two songs<sup>69</sup> show much variation from the standard harmonic repertoire, whereas in the second LP<sup>70</sup> the majority of tracks show great originality and departure from standard chord sequences and phrase structure.<sup>71</sup> In the remaining three LPs<sup>72</sup> all the songs are harmonically quite ingenious<sup>73</sup> and show amongst other things originality of instrumentation and tone colour.<sup>74</sup> This trend of greater harmonic sophistication is also discernible in more recent releases by the Rolling Stones.<sup>75</sup>

A point to be added here is that when some pop groups split up, individual members then tend to follow their own personal choice in music. This is particularly true of school groups whose members often seem to turn their abilities to the more complicated world of jazz.<sup>76</sup> This seems to show, contrary to the opinion of classical music devotees, that pop music is per se developable to greater degrees of sophistication (even though greater formal sophistication must be excluded as a possibility if the standard presentation of pop music is to be in the three-minute record form), and also that players of pop music are not incurably bent on the 'desecration' of our art.

The above should be taken into account when weighing the possibilities of using pop music in secondary education. It seems that it would be most desirable to use pop as the point of contact and that it should be developed in school as a creative art form, thus leading on to appreciation of and participation in many other forms of music.

To assume that all these suggestions could be implemented in the very near future would be naive. It is also important to remember the possible adverse effects of pop music's officialisation, mentioned earlier. To understand such effects it is merely necessary to look at the efforts of modern churchmen and theological reformers to introduce pop music into servic-

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68. *Please Please Me*, Parlophone, 1962.

69. The songs are *There's A Place* and *Please Please Me*.

70. *With The Beatles*, Parlophone, November 1963.

71. See, for example, the 10 and 7-bar phrases plus the aeolian cadences in *Not A Second Time*.

72. *A Hard Day's Night*, April 1964; *Beatles For Sale*, September 1964; *Rubber Soul*, 1965; all on Parlophone.

73. e.g. *Michelle* which oscillates between major and minor and includes augmented triads too.

74. For example, *Norwegian Wood* includes a sitar part played by George Harrison and *Yesterday* is accompanied by a string quartet.

75. For example, many songs on *Aftermath*; Decca, 1966.

76. e.g. The Saints (Leys School, Cambridge) whose lead guitarist and bass player changed over to modern jazz when the group split in 1962-3. See also *Vogue Sound* (Cambridge University, 1964-5).

es. Failure will be the most likely result of efforts, however well-intentioned, to put across totally foreign ideas across in an idiom understood as incompatible with those ideas. Admittedly, had the so-called 'pop' music which many ministers of the church seemed to find attractive been substituted by a musical language nearer that of the clientele they hoped to attract, they might have had a little more success in the venture.<sup>77</sup>

Bearing the above in mind, we might resolve to make our use of pop music for putting across that which we think of worth in a more subtle way, perhaps a bit like Henry Wood's conversion of the concert-going masses by gradual introduction into Promenade Concerts of music he considered worthwhile. However, this strategy also appears to be missing the point: that we as teachers should try and persuade pupils to accept our kind of culture rather than trying to extend and develop theirs would be a misdirected effort. Even if the music teacher's ultimate aim were to encourage the class to listen to Beethoven rather than the Beatles, would not the most effective real listening be done only if the pupils had been involved in music of some kind themselves which would give them real grounds for appreciation? And seeing that it would probably be far too big a transfer of cultural focus from Beatles directly to Beethoven, would it not be better to give them practical experience of the music they are at home with before trying to base an empty response to classical music on no practical participation at all? However, even if a teacher were to use pop music as a start for first-hand contact with music with the ultimate aim of reaching the classics, would this not also seem rather misguided, if not also intellectually and emotionally dishonest?

### **Summary**

At the beginning of this essay it was stated that there is a very real need for effective music education, especially in the field of those children who in the future are likely to be lumbered with amounts of leisure time never before encountered in the history of Western civilisation. To as it were coax love of the classics out of children who are devoted to pop puts culture on the defensive,<sup>78</sup> just as the church is currently on the defensive, trying to coax young people into the faith by putting old wine into new bottles (i.e. out-of-date expressions of religious conviction in not quite up-to-date pop music). It is, to extend the metaphor, the wine which needs changing, not the bottles. In terms of education this would mean that no longer would music lessons be centred on works of the distant past, nor necessarily exclusively on any pre-

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<sup>77</sup>. See, for example, Geoffrey Beaumont: *A Folk Mass*. London: Weinberger.

<sup>78</sup>. Silberman, *op. cit.*, p. 206.

composed work, but round and in the present culture. For it is surely pop music, despite all its commercial overtones and with all its social functions, that speaks to the condition and expresses the condition of humans today far more effectively than does that of the past. Is it not up to the teacher, as a technical expert in music, to lead and develop the pupils' inherent music culture into something usable, communicable and of tangible value, rather than impose his/her own, usually coloured, set of values on his/her pupils?

"Preserve culture!... Since the beginning of the machine age, this has been the cry of all those who fear the dehumanisation of mankind and are concerned for his culture. They set out from the notion that it is humanity and the work of art which must be defended and saved, thus forgetting the fact that it is, quite simply, man who must be saved. I firmly believe that the time has come for the technological progress of our time to create a new feeling of human unity, and thus to rediscover the world as a potential realm for collective humanity, in which differences of socio-cultural systems do not necessarily lead to distinctions of superiority and inferiority'... 'The necessary preliminary to this is to know mankind – for this is the goal and the means of all art. To reach the true meaning of any work of art we must set out from mankind: from his thought, feeling and desires, his creations, his structure, function and behaviour; for if mankind is neglected, will not music also perish?"<sup>79</sup>

It is in this spirit that this study has been undertaken.

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79. Silbermann, *op. cit.*, pp. 206-7.

## Appendix 1: Bibliography

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## Appendix 2: Questionnaire details

### **Classical Music Background, Pop Culture Mentality and Pop Music Discrimination Survey.**

This is just my mark sheet of the questionnaire given to 131 grammar school boys (1st and 2nd year) and to 213 children at a comprehensive school (1st-4th years).<sup>80</sup>

The questions which appeared in both questionnaires are in bold type, thus: **25**. Questions for which a short musical extract was played are marked with an asterisk, thus: **4\***.

The questionnaires were answered in class, and the children had to underline the category or answer to the question which they thought was the most suitable, truest or most correct.

Markings appear in square brackets after each alternative in the questions. Alternatives with no mark in square brackets were given no marks.

#### **SECTION A**

Family musical background, amount of triadic/classical<sup>81</sup> harmonies and concepts in the child's experience.

- 1\*. *The composer of this music* [Opening of Serenade for Strings by Tchaikovsky] was: Beethoven [1]; Tchaikovsky [2]; Mozart; Haydn; Chopin.
- 2\*. *In this extract* [pastoral passage from William Tell Overture by Rossini] *there are two solo instruments. Please name them.* (Writing cor anglais and flute gave 2 marks each, writing oboe and piccolo gave 1 mark each. No other instruments gave any marks.)
- 3\*. *This music* [part of a Couperin clavecin ordre] *was written in which century?* (1 mark for either 17th and 18th century. No other marks given.)
- 4\*. *This tune is in:* the major key; the minor key [2]; no key at all; both major and minor keys.
5. *Is there a piano in your home?* yes [2]; no; there used to be [1]; we are getting one [1].
6. *I go to church:* often [3]; sometimes [2]; seldom [1]; never.
7. *My parents listen to music:* often [3]; sometimes [2]; seldom [1]; never.
8. *Do your parents play an instrument or sing in a choir?* yes [2]; no.
9. *Do any of your brothers/sisters play an instrument or sing in a choir?* yes [2]; no.
10. *My parents prefer old music:* very true [4]; true [3]; middling [2]; false [1]; very false.
11. *My parents dislike pop music:* very true [4]; true [3]; middling [2]; false [1]; very false.
12. *My parents think the Rolling Stones are long-haired layabouts:* very true [4]; true [3]; middling [2]; false [1]; very false.
13. *We have a record-player or a tape recorder at home:* yes [1]; no; both [2].
14. *We have more pop than classical records:* yes; no [2]; neither.

80. Please note that questionnaire results for only 209 of the 213 respondents at Plant Hill Comprehensive School are contained in Appendix 3a: Survey results – details. For explanations, see foreword.

81. Today I would call this 'tertial/classical'. See Tagg's Harmony Handout (2000), [www.tagg.org/teaching/harmonyhandout.pdf](http://www.tagg.org/teaching/harmonyhandout.pdf).

15. We have some jazz recordings at home: yes [2]; no [1]; don't know.
16. My parents dislike pop music because it is all too loud: very true [4]; true [3]; middling [2]; false [1]; very false.
17. Gilbert and Sullivan wrote: musicals [1]; symphonies; songs [1]; operettas [2]; scripts for a TV serial.
18. "Harmony" means: a good tune; a good beat; the chords under a melody [2]; nice sounds in a piece of music [1].

### Section B

'With-it-ness', extent of identification, or will to identify, with the mystique and aura surrounding pop music and pop culture in general, extent of identification with the commercial presentation rather than the personal.

1. EITHER [for boys] *Football is marvellous* OR [for girls] *Going dancing is marvellous*. very true [4]; true [3]; middling [2]; false [1]; very false.
2. EITHER [boys] *I like sport* OR [girls] *I read magazines like Vogue, Honey, Petticoat etc.*: very true [4]; true [3]; middling [2]; false [1]; very false.
3. EITHER [boys] *Last Saturday, Manchester United were playing ...* (2 for correct, otherwise 0) OR [girls] *Underline which of the following you think is a French fashion designer: Teilhard de Chardin; Jacques Clouzot; Jules Maigret; Pierre Cardin* [2]; Georges Pompidou.
4. EITHER [boys] *Most men like football* OR [girls] *Most men spend more than half their money on clothes, hair-dos and other beauty treatment*: very true [4]; true [3]; middling [2]; false [1]; very false.
5. *Most grown-ups smoke*: very true [4]; true [3]; middling [2]; false [1]; very false.
6. *It is silly for older people to like pop music*: very true [4]; true [3]; middling [2]; false [1]; very false.
7. *If you are a teenager and you do not like pop music there is something wrong with you*: very true [4]; true [3]; middling [2]; false [1]; very false.
8. *Boys should be allowed to grow their hair as long as they like*: very true [4]; true [3]; middling [2]; false [1]; very false.
9. *My friends and most of the people my age like the kind of music I do*: very true [4]; true [3]; middling [2]; false [1]; very false.
10. *Pop stars tend to lead a very exciting life*: very true [4]; true [3]; middling [2]; false [1]; very false.
11. *A really "switched-on" person tends to be more popular with the opposite sex*: very true [4]; true [3]; middling [2]; false [1]; very false.
12. *A teenager should be able to do all the latest kinds of dance*: very true [4]; true [3]; middling [2]; false [1]; very false.
13. *A mod boy's haircut should be*: long all over; long at front, short at back; short at front, long at back [2]; all short; ordinary.
14. *I watch RSG:<sup>82</sup> always* [3]; sometimes [2]; seldom [1]; never.
15. *I watch Top of the Pops*: always [3]; sometimes [2]; seldom [1]; never.
16. *Top of the Pops is a better programme than RSG*: true; false [2]; they're about the same.
17. *If I had to take up an instrument I would learn*: piano [2]; clarinet [1]; guitar [3]; violin.
18. *Classical music is wet and drippy*: always [3]; sometimes [2]; seldom [1]; never.
19. *A parka is*: an American parking meter; a US Army combat coat [1]; a make of Italian sports car; short for "Post Artificial Respiration Cardiac Anaesthetic".
20. *I listen to Radio Caroline*: often [3]; sometimes [2]; seldom [1]; never.
21. *Mary Quant is*: a dress designer [1]; pop singer; jazz singer; TV actress; modern painter.
22. *"Op art" means*: modern sculpture; artistic advertising; the use of geometric patterns in fabric design [1]; the same as "pop art".
23. *PVC (polyvinyl chloride) is used for*: amplifying sounds; putting in cough pastilles; making shiny coats [1]; making disinfectant.
24. *A "strike" means*: going over 90 m.p.h. on the M6; a hit and run robbery; knocking down ten bowling pins with one ball [1]; a new type of American dance.

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82. Ready Steady Go: ITV's then 'trendier' equivalent of BBC's Top of the Pops.

25. *I watch The Man from U.N.C.L.E:* often [3]; sometimes [2]; sometimes [2]; seldom [1]; never.
26. *Of the following, my favourite TV programme is:* Thank Your Lucky Stars [1]; Stramash [1]; Top of the Pops [2]; Juke Box Jury [1]; Dr Who; RSG<sup>82</sup> [3].
27. *I go ten-pin bowling:* often [3]; sometimes [2]; sometimes [2]; seldom [1]; never.

### SECTION C

Critical listening ability within the language of pop music: knowledge about instruments involved, recognition of styles, preferences, etc.

- 1\*. *The first instrument to be heard on this disc* [Keep on Running by The Spencer Davis Group] *is:* lead guitar; rhythm guitar; bass guitar [2]; saxophone.
- 2\*. *I would describe this music* [I Get Around by The Beach Boys] *as:* Liverpool Sound; R&B; Rock; a ballad; folk; surfing sound [2]; Motown.
- 2\*. *I would describe this music* [Nowhere To Run by Martha & The Vandellas] *as:* Liverpool Sound; R&B; Rock; a ballad; folk; surfing sound; Motown [2].
- 4\*. *On this LP track, there are four musicians playing. What instruments are they playing?* piano, bass, drums, guitar (1 mark each).
- 5\*. *The singer on this disc is.....* (Eric Burdon [2]; Lead singer of The Animals [1]).
- 6\*. *The group on this disc* (Don't You Worry About Me by The Swinging Blue Jeans) *is.....* Near guesses given 1 mark, correct answer 2 marks.
- 7\*. *The Bachelors' records are really more for older people:* very true [4]; true[5]; middling [2]; false [1]; very false.
8. *The Beatles have stayed at the top because their records are musically better than most groups':* very true [4]; true[5]; middling [2]; false [1]; very false.
9. *Of the following, the best point about The Who is:* the words [1]; their outfit; the sound they make with their instruments [2]; don't know.
10. *The best Manchester group of the following is:* The Fourmost [1]; The Lancastrians [1]; Manfred Mann; St. Louis Union [1]; The Hollies [2].
11. *The best thing about The Walker Brothers is:* their tunes [1]; their looks; their voices [2]; the backing [1]; don't know.
12. *If I had the money, I would buy an LP by:* James Brown [2]; Manfred Mann [2]; The Hollies [1]; The Bachelors.
13. *If I had the money, I would buy an LP by:* Beethoven [1]; Tchaikovsky; The Animals [2]; Andy Williams.
14. *If I had the money, I would buy the following LP:* The Sound of Music; The Pirates of Penzance; Out of our Heads [2]; West Side Story [1].
15. *I think the best record by the Beatles is:* Can't Buy Me Love [1]; Ticket To Ride [3]; She Loves You [2]; Yesterday [3]; We Can Work It Out [2]; They're all the same standard. (Judged on harmonic and rhythmic sophistication of the various discs).
16. *Thelonius Monk is:* a conductor; lead guitarist; concert violinist; modern jazz musician [2]; composer [1]).
17. *Lead guitarist in The Beatles is.....* (George Harrison, 1 mark).
18. *Most of the Beatles' tunes are written by.....* (John Lennon & Paul McCartney 1 mark each).
19. *Two of The Rolling stones also write a lot of songs. Which ones are they?.....* (Mick Jagger and Keith Richard 1 mark each).
20. *Name any disc recorded by Joan Baez.....* (There But For Fortune [1], Any other by Baez [2])
21. *A rhythm guitarist plays:* chords [2]; the beat [1]; the tune; odd notes here and there; solos.
22. *Which of the following records has a trumpet part somewhere in the backing:* Keep On Running; 19th Nervous Breakdown; We Can Work It Out; Shapes Of Things; These Boots Are Made For Walking [2].
23. *The best adjective to describe the kind of discs recorded by The Seekers is:* sad [1]; funny; sentimental [2]; wild; hymn-like [3].
24. *Ken Dodd's records made the top because they were specially good:* very true; true; middling [1]; false [2]; very false [3].
25. *They sing and play "live" on Top of the Pops:* Yes; No [1].
26. *They sing and play "live" on RSG:* Yes [1]; No.
27. *There are three recordings of Yesterday. In the space provided, write in*

- the artist's name(s) against the appropriate backing: orchestra (Matt Munro); choir (Marianne Faithful); string quartet (Paul McCartney) [1 mark each].*
28. *On the record We can Work it Out John Lennon plays: mouth organ; harmonium [1]; rhythm guitar; lead guitar; Nietzschephone; he doesn't - he sings.*
30. *I have definite tastes in pop music: very true [4]; true[3]; middling [2]; false [1]; very false.*
31. *The best tune recorded by The Stones is: Satisfsction[2]; The Spider and The Fly [2]; Play With Fire [2]; The Last Time; 19th Nervous Breakdown [1]; It's All Over Now [1]; You'd Better Move On [2]; I like them all just as much; I hate them all (judged by harmonic, rhythmic interest and on originality of record).*
32. *(Included mainly for interest) Write in the space provided the name of your favourite group or singer.....(If the pupil chose a group or singer whose records tend to have harmonic, rhythmic or improvisational interest or originality, a max. of two marks were given. If however it is apparent from the remainder of the answers in Section C and in Section 2 that the pupil is more interested in following the crowds, then he/she would receive only one or perhaps no marks at all, especially if the group chosen used old material and had little originality).*
33. *Write down, in the space provided, the name of the group or singer who you like least..... (Same principles of marking apply here as they did in no. 32, except in reverse).*

### Appendix 3a: Survey results – details

Y=year | F=form | S=sex (B=boy, G=girl) | A% B% C%: % scores on sections A, B & C.  
 Average scores: A: 48%, B: 69%, C: 59%.

**Survey results**

Y	F	S	A%	B%	C%
1	A	B	45	62	30
1	A	B	49	58	47
1	A	B	47	59	55
1	A	B	28	84	47
1	A	B	53	74	50
1	A	B	38	75	54
1	A	B	40	78	54
1	A	B	36	47	42
1	A	B	51	56	55
1	A	B	49	53	54
1	A	B	40	74	34
1	A	B	55	51	49
1	A	B	47	71	61
1	A	B	40	64	55
1	A	G	49	73	53
1	A	G	47	68	50
1	A	G	68	38	37
1	A	G	45	62	28
1	A	G	51	68	49
1	A	G	49	42	39
1	A	G	53	70	51
1	A	G	40	60	47
1	A	G	40	75	43
1	A	G	43	68	43
1	A	G	66	55	38
1	A	G	49	63	38
1	A	G	47	59	36
1	A	G	66	49	41
2	A	B	47	77	54
2	A	B	49	70	59
2	A	B	53	77	70
2	A	B	38	70	78
2	A	B	68	56	76
2	A	B	38	56	50
2	A	B	40	66	74
2	A	B	38	74	58
2	A	B	32	71	53
2	A	B	79	88	63
2	A	B	70	55	51
2	A	B	40	71	70
2	A	B	47	40	37
2	A	B	91	73	42
2	A	B	60	75	67
2	A	B	45	86	66
2	A	B	55	63	84

Y	F	S	A%	B%	C%
2	A	B	28	99	71
2	A	G	51	90	78
2	A	G	26	85	64
2	A	G	53	77	71
2	A	G	55	85	71
2	A	G	55	82	63
2	A	G	47	77	70
2	A	G	51	79	70
2	A	G	36	48	76
2	A	G	55	95	66
2	A	G	43	64	50
2	A	G	40	63	72
2	A	G	55	92	66
2	A	G	45	42	53
3	A	B	38	62	53
3	A	B	51	63	38
3	A	B	62	62	51
3	A	B	55	60	75
3	A	B	49	77	67
3	A	B	53	27	20
3	A	B	49	59	50
3	A	B	43	78	71
3	A	B	36	93	76
3	A	B	38	84	84
3	A	G	62	42	61
3	A	G	49	56	59
3	A	G	51	68	71
3	A	G	49	79	72
3	A	G	36	73	70
3	A	G	51	75	72
3	A	G	45	96	88
3	A	G	60	75	63
3	A	G	55	63	62
3	A	G	51	64	68
3	A	G	51	58	74
3	A	G	62	63	66
3	A	G	53	73	63
3	A	G	51	68	68
3	A	G	64	42	34
3	A	G	64	40	57
3	A	G	47	68	67
3	A	G	36	67	74
3	A	G	51	64	47
3	A	G	51	60	70
3	A	G	45	56	59
3	A	G	45	74	78

Y	F	S	A%	B%	C%
3	B	B	53	73	67
3	B	B	70	63	66
3	B	B	51	84	72
3	B	B	34	59	41
3	B	B	45	78	70
3	B	B	53	73	54
3	B	B	36	60	67
3	B	B	47	79	74
3	B	B	51	86	61
3	B	B	51	70	67
3	B	B	60	67	57
3	B	B	55	89	67
3	B	B	49	73	57
3	B	B	45	63	50
3	B	G	53	70	63
3	B	G	47	84	72
3	B	G	45	73	66
3	B	G	51	73	61
3	B	G	53	82	78
3	B	G	49	84	78
3	B	G	40	84	70
3	B	G	32	49	67
3	B	G	57	79	70
3	B	G	47	71	72
3	B	G	51	71	62
3	B	G	53	77	64
3	B	G	43	68	68
3	B	G	53	81	74
3	B	G	47	81	66
3	B	G	55	74	62
3	B	G	47	78	67
3	B	G	64	62	70
3	E	B	55	89	79
3	E	B	40	70	71
3	E	B	38	73	50
3	E	B	47	75	82
3	E	B	60	90	66
3	E	B	40	73	54
3	E	B	38	67	43
3	E	B	40	56	50
3	E	B	43	68	58
3	E	B	30	73	55
3	E	B	57	62	45
3	E	B	53	71	46
3	E	B	38	82	50
3	E	B	45	81	51
3	E	G	38	73	55

Survey results, cont'd

3	E	G	55	74	67
3	E	G	53	81	50
3	E	G	45	75	64
3	E	G	45	82	79
3	E	G	43	63	49
3	E	G	49	64	45
3	E	G	38	64	46
3	E	G	40	55	30
3	E	G	49	75	59
3	E	G	38	66	47
3	F	B	45	64	63
3	F	B	49	82	58
3	F	B	57	89	46
3	F	B	47	49	46
3	F	B	40	77	51
3	F	B	30	67	39
3	F	B	72	51	29
3	F	B	51	77	43
3	F	B	43	73	53
3	F	B	45	44	55
3	F	B	45	82	62
3	F	B	43	74	50
3	F	B	60	90	42
3	F	B	49	56	64
3	F	G	38	77	80
3	F	G	36	86	49
3	F	G	34	81	49
3	F	G	32	74	47
3	F	G	40	75	57
3	F	G	45	77	59
3	F	G	55	77	61
3	F	G	40	79	64
3	F	G	43	73	54
3	F	G	32	81	45
3	F	G	45	78	55
3	F	G	45	79	50
3	F	G	57	78	53
3	F	G	60	34	29
3	F	G	45	71	64
3	F	G	32	63	62
4	A	G	55	56	67
4	A	G	38	73	82
4	A	G	60	66	68
4	A	G	72	60	61
4	A	G	60	66	71
4	A	G	53	58	80
4	A	G	49	78	64
4	B	G	34	79	54
4	B	G	49	63	67
4	B	G	43	81	75
4	B	G	49	70	72
4	B	G	38	63	64
4	B	G	51	68	74
4	B	G	32	70	71
4	B	G	64	45	71

4	B	G	49	67	72
4	B	G	34	71	72
4	B	G	53	58	54
4	B	G	47	63	67
4	B	G	28	47	74
4	B	G	47	59	70
4	B	G	45	66	76
4	B	G	57	70	72
4	B	G	43	71	66
4	B	G	57	53	42
4	B	G	64	45	71
4	B	G	49	67	72
4	B	G	34	71	72
4	B	G	53	58	54

### Appendix 3b: Averages

Rows 1 through 4 show average scores on sections A, B and C for boys (first three columns) and girls (middle three columns), as well as for all together (last three columns), for each form (year) to have participated in the questionnaire at Plant Hill Comprehensive School.

Row 5 shows average scores for boys and girls, as well as for all together, in all forms.

The remaining rows show: [6] average scores on sections B and C for all those who scored above average on section A (>48%); [7] average scores on sections B and C for all those who scored under average on section A (<=48%); [8] average scores on sections A and C for all those who scored above average on section B (>69%); [9] average scores on sections A and C for all those who scored under average on section B (<=69%); [10] average scores on sections A and B for all those who scored above average on section C (>59%); [11] average scores on sections A and B for all those who scored under average on section C (<=59%).

	Boys A	Boys B	Boys C	Girls A	Girls B	Girls C	All A	All B	All C
Form 1	44	65	42	51	61	42	48	63	46
Form 2	51	70	62	47	75	67	49	72	64
Form 3	48	71	57	48	70	61	48	70	59
Form 4	-	-	-	48	65	68	48	65	68
All	48	70	57	48	68	61	48	69	59
A% > 48 (aver.)	-	-	-	-	-	-	-	68	60
A% < 48 (aver.)	-	-	-	-	-	-	-	70	59
B% > 69 (aver.)	-	-	-	-	-	-	47	-	63
B% < 69 (aver.)	-	-	-	-	-	-	50	-	55
C% > 59 (aver.)	-	-	-	-	-	-	49	73	-
C% < 59 (aver.)	-	-	-	-	-	-	47	65	-

This table shows:

- little or no variation in scores on section A
- marginally lower scores on section B in year 1
- visibly lower scores on section C in year 1
- marginally higher for girls than for boys on section C
- little or no correlation between section A and section C
- high score on section C more likely if high score on section B and vice versa

