

Meeting the Musical Needs of Mainstreamed Blind and Low Vision Students

Tom Macmahon, *BMus(Hons), AduDipT, RMT*

Abstract:

This paper provides an overview of literature and findings of a survey on the musical needs of mainstreamed blind and low vision students and their teachers and establishes the viability, potential and importance of music in the education of blind students. The needs of visually impaired students and their teachers are discussed and suggestions and recommendations made for the future in light of current educational trends and the various resources and high-tech equipment now available.

The author's work is involved primarily with blind (braille-using) students whose specific needs and difficulties are both obvious and complex. Also, there has been involvement with low-vision (large-print using) students whose needs and difficulties are often less obvious but, nonetheless, equally worthy of attention and inclusion in this discussion. The author's research and considerations are based on personal experiences, an examination of the literature, assisted by an Education Department Special Services Division Library computer search, discussions with others in the field and the responses to some survey/questionnaires distributed to a cross-section of blind students and some regular school music teachers involved with mainstreamed students. Neither the literary research nor the data collection from surveys is by any means exhaustive or complete, but would certainly seem adequate for this discussion and to provide the basis for more thorough investigation in the near future.

This paper was stimulated by the following observations and experiences:

- (1) Observing and attempting to cater for the difficulties of primary and secondary students involved in mainstream music classes and activities;
- (2) Encounters, music-making and discussions over the past decade with blind musicians and music teachers who have successful careers in both the blind and sighted worlds;
- (3) Contact teaching experiences and discussions with blind students and the National Braille Music Camps (1986 to 1990).

Traditionally, music has enjoyed an important and justified position of significance in the education and lives of blind students. This can and should still be so. However, this significance of the role of music has also been considerably diluted and overlooked (or simply just not considered or adequately catered for) in recent years. MacLeod (1987) observes that very few enquiries into the musical ability of the blind have been carried out for many decades and suggests that perhaps part of the conventional 'wisdom' that blind people study and are good at music may be due to the association of blindness with piano tuning. However, it is clear that the associations are much broader than this. Mooney (1972) comments that blindness is less of a handicap in the field of music than in many other areas of learning, stating very realistically that 'not all blind children are musically talented, but from infancy have had to learn with more perceptiveness than sighted children'. (p. 56) So, musical activities can be a source of great pleasure, a place to meet classmates on an equal footing and an opportunity to develop creativity. Indeed, a significant number of very competent blind musicians, composers/arrangers and music teachers have emerged over the years. Shepherd and Simons (1970) even state that 'music teachers must recognize that blind musicians, by virtue of their handicap, possess certain abilities far in excess of sighted students'. (p. 80)

Visual impairment (VI) is a very low-incidence disability in Australia and this, coupled with geographic size, means that many students are relatively isolated from adequate and regular specialist support services and access to various resources. Furthermore, of those having educationally significant visual loss, only a relatively small percentage are braille-users. These considerations are based mainly on the VI population with whom the author has contact. Of these, the musically least disadvantaged students appear to be those in the larger metropolitan Special Education Units attached to regular primary or secondary schools. This is the case for the majority of blind students in South Australia and Queensland. For those who are mainstreamed into their local schools, as is largely the case in Victoria and New South Wales, as well as those in remote areas, special needs must often be met by visiting or itinerant teacher services (Advisory Support Teachers). The special needs include those relating to music studies. However, few such teachers have expertise in music, especially braille music.

Integration or mainstreaming has some obvious advantages, more so for some than others, but this is a broad and very controversial subject. However, levels of specialist servicing and resourcing have suffered in many cases. More specialised aspects of music education, including preparation for meeting the needs of VI students in the regular music class, seem to be sadly neglected in most pre- and in-service teacher training. As Shepherd and Simons (1970) point out, 'Untrained teachers often feel inadequate to deal with students whose problems they do not fully understand' (p. 80); they feel that special techniques are required and so will often tend to leave the teaching of these students to others.

McReynolds (1988) expresses a view probably more relevant to students in the more isolated situation, but one which is still sometimes sadly applicable even in our Special Unit situation:

'Most mainstream students are denied the opportunity to be involved in extra-curricula activities where acceptance and recognition can result from dedication and hard work . . . Unless a visually impaired student is popular because he or she is exception'lly talented, attractive or even wealthy, being different makes acceptance difficult within the school environment.' (p. 36)

In considering some of the Music Therapy related aspects, the role of music needs to be considered on a continuum in its various functions in education and development from infancy through to high school and beyond. 'Blindisms', the various mannerisms common amongst many blind individuals, particularly those totally blind from birth, are well-known and documented. So, too, is the fact that considerably more concentration, and often time, is required by the average blind person to achieve many things on a parallel with sighted peers, thus introducing additional stresses and tensions. For such reasons, music's therapeutic potential can and should come into play throughout blind students' educational lives.

Kersten (1981) suggests that many music activities of the school programme which are primarily recreational for sighted children, tend to be more therapeutic for blind children, helping to improve many physical problems: 'While aesthetic aspects are important, such considerations become secondary to the correcting value of the art'. (p. 63) Steele and Crawford (1982) outline some primary therapeutic goals: altering poor posture and gait, unusual body movements and other mannerisms often associated with blindness. Other objectives include increasing awareness of people and the surrounding environment, improving communication abilities and developing personal, social, listening and other skills. Music in association with relaxation is also of importance to assist in reducing the high levels of psychological and physiological tension often experienced by blind children.

From the author's observations during the past decade, it seems quite clear that there is a high preponderance of perfect pitch and excellent musical (especially melodic) memory amongst young blind musicians, many of whom can reproduce rhythmic patterns with accuracy. However, this is offset to some extent by an often surprisingly poor degree of real rhythmic understanding and accuracy when it comes to notation. The author has recently been in a position to work with an increased number of competent and musically talented secondary students. The great majority of them have a higher than average degree of difficulty in accurately determining metre, time signatures, the position of accentuated beats, placement of bar lines and the analysis and notation of dotted and other more complex rhythmic patterns. The author is becoming convinced that Jacques Dalcroze should be heeded and his educational approach through eurhythmics much more generally and consistently practised. He provides a number of musically related exercises developed specifically for visually impaired students in his book *Eurhythmics, Art and Education* (1930, cited Kersten, 1981) Space, time and energy were of primary concern in his work, incorporating such elements as axial movements (including twisting, bending and stretching) as well as locomotion, while other principal objectives included object awareness, tactile sensibility and muscular consciousness. 'These activities can also naturally help improve awkward posture and movements that draw attention to the visually handicapped, alleviate clumsiness and poor coordination, overcome limited childhood movement experiences and instil confidence in psycho-motor abilities.' (Kersten, 1981 p. 63). The author of this paper considers that rhythmic feeling, expression and comprehension will also be significantly enhanced.

Neither free and expressive nor rhythmic and controlled movement is adequately stressed or developed. Many blind teenagers (and for that matter, adults) are still very restricted and inhibited in any form of dance or movement to music. The present author is currently making efforts to concentrate more on these areas with younger students and anticipate future rewards for them in musical and non-musical fields.

Results of Surveys

A survey of the 'Musical Needs of Mainstreamed Blind and Low Vision Students' was distributed to 29 students aged 7-12 years, in Queensland, New South Wales, Victoria, Adelaide and Darwin. Of the 29 questionnaires sent out, there were 11 responses.

Survey of Students

(1) Musical Hopes and Aspirations

Although only three respondents anticipated tertiary studies, almost all were keen to maintain music as a prominent part of life, most hoping for opportunities to entertain, especially in the pop scene. One hoped to become a classroom music teacher and several hoped to do some private instrumental teaching. Some also indicated interest in radio work and sound engineering.

The author suggests other possible vocational choices, including music therapy, entertainment (working as soloist or sessional musician or instrumentalist in a band or orchestra), composition and/or arrangement, piano tuning and retailing. All these are options which, from the author's experiences and enquiries, would appear to be perfectly viable for blind musicians and, indeed, provide employment currently for quite a few.

(2) Instruments

As may be expected, most students seem to learn piano, and generally from early school age. Almost half the respondents had studied piano to at least A.M.E.B. 6th Grade

and some have also studied theory/musicianship to at least 4th grade. A significant number also played guitar and/or at least one other instrument, or had studied singing.

Most principal practical studies were undertaken privately, often with teachers who know little or nothing about braille music, while other instrumental tuition was frequently on band or orchestral instruments within the school system where many instructors were similarly inexperienced with such special needs students. In Queensland, the author endeavours to establish and/or maintain liaison with such teachers to provide consultation, resources, some basic understanding of braille or large-print music usage and availability, etc. McReynolds (1988) describes very well the concerns often felt by regular school band and instrumental teachers. He offers many helpful suggestions regarding the use of braille, large-print and taped music for learning parts and the adaptation of marching lyres to bring large-print to the desired focal position for low-vision players, thus assisting students to memorise parts more easily and maintain correct embouchure and playing posture whilst reading at close range. He also discusses a number of brass instruments for which stands can be made to support the weight of the instrument so that one hand can be freed for reading braille parts.

(3) School Musical Involvement

Most were involved in whatever classroom music programmes their particular schools offered. A few were also in choirs or bands, although these students generally experienced some difficulties regarding obtaining and learning parts within the required time.

(4) Meeting of Needs

In response to the question asking students if they felt their needs were being met adequately, less than half gave unqualified 'yes' answers. The remainder gave 'fairly' or 'no' responses. All these students were in school situations where teachers knew nothing about and/or were apparently not interested in either braille music or the specific needs and difficulties. Neither did these students have regular contact with specialist teachers who could offer adequate assistance.

(5) Adequacy of Teaching, Assistance, Understanding, Opportunities and Resources

This question asked students if they considered they had adequate (a) teaching, (b) assistance with braille music, (c) understanding of specific needs by school music teachers and any visiting support or specialist teachers, (d) opportunities for music-making or involvement in choirs, ensembles, bands etc., and (e) braille and audio materials and resources – music, textbooks etc.

Responses ranged from adequate levels of teaching, assistance, understanding of needs by teachers, braille and audio resources, through 'on the whole' and 'fairly' to 'no'. A few students have spent several years' trying to secure adequate teacher understanding, braille resources and assistance. With regard to (d), more than half did not have adequate opportunities for involvement, largely due to a complete lack, or an insufficiency, of such music-making activities within their school setting. Most would seem to be anxious to be involved in much more choir, band and ensemble activity.

(6) In What Ways Could Things be Improved?

Comments and suggestions from all respondents revolved around the need for improved access to a wider variety of braille music and texts, as well as more specialist servicing and/or understanding of braille and visually impaired students by school music teachers. Some more specific suggestions included the need for teacher in-servicing, more braille music transcribers and perhaps several strands within the compulsory early high school music subjects to cater for those with no musical background, those with some background and interest and those who are more advanced. (The author is aware of many

musically competent blind and low vision students who became extremely bored and frustrated by the year 8 music programme!)

(7) *Technology to Assist*

With regard to recording and computer technology (e.g. audio recordings of musical works for study, textbooks on tape, access to databases or CD ROM's (compact disc read only memory – texts, encyclopaedia etc. to be read by computer) for accessing general information, some means for printing out music for school assignments, compositions, arrangements or parts for other musicians, etc., or computer programmes to enable quicker and easier acquisition of braille music), most felt all such suggested areas and possibilities would be of great assistance. A number already used computers (especially the Robotron Eureka A4), some for helping with music composition and printing. One suggested that part of high school music studies should include how to utilise relevant computer and technological aids and access more information via electronic media. Another respondent suggested that it would be very useful to have a central place to contact in order to find out what resources are available.

Many seemed to have to rely heavily on their ears and memories in the mainstream class situation. Music literature (in braille and recorded on cassette), recorded examples for study, braille scores (from short classroom exercises to orchestral scores) and means for obtaining transcription into print of assignments, compositions or parts for other performers, all seemed to be inadequate.

Recording and computer technology is being used to some extent, but the range and potential is, as yet, largely unexploited. Availability is a major problem:

- (a) Due to limited demands, the range of material, though improving, is still not great.
- (b) Location and quick procuring of material is also difficult. The National Union Catalogue is of great assistance but, as yet, does not include any of the quite diverse and widely distributed braille music now in existence.
- (c) Some of the text material is only available on four-track, half-speed cassette formats which are inaccessible for those without appropriate playback equipment.
- (d) Braille music, when it is available, is usually tardily obtained and often from different editions, making location of specific passages and quick references in class difficult.
- (e) The Robotron Eureka computer is used for music composition and arrangement. To date, its production of printed music has been rather limited, but a much more sophisticated music print programme now just available, promises to provide accurate music production for up to nine staves. A Musical Instrument Digital Interface (MIDI) would be an excellent future expansion. Much experimentation and expenditure of funds and time have still not succeeded in making conventional keyboard-to-computer MIDI accessible for blind users. To date, all programmes are very visually screen oriented. However, the technology and know-how exist and it is probably only a matter of time – and regrettably, dollars before the blind musician can play his/her compositions or arrangements on a keyboard, overlay tracks, edit and secure accurate printed notation.
- (f) There have been computer programmes available for some years for computer-assisted braille music transcription, but these all necessitate a sound working knowledge of the intricacies of braille music notation. In theory, it should be possible to design a programme to allow 'braille-handicapped' music teachers and others to produce braille music via computer. Work has been done overseas towards this end, but as yet, no finished product is known in Australia.

(8) Advantages and Disadvantages of Mainstreaming

With regard to advantages and/or disadvantages found with integration or mainstreaming in music education and general musical activities and involvement, the interesting variety of responses given are summarised as follows:

Advantages

- i. Some students felt the regular school offered more band opportunities.
- ii. One student considered that, although having limited involvement, that she was lucky in always having access to teachers and help in music – ‘I know of others not so lucky.’
- iii. Another said there is the opportunity to ‘cover a lot more work and have regular assessment’.
- iv. There was a ‘chance to take part in many activities (such as the school musical) each year.’
- v. Another respondent suggested that it is an advantage for sighted people to learn more about blind people as students and musicians and how braille music works.

Disadvantages

- i. There is ‘often not enough time to get things brailled for class use’, choirs etc.
- ii. There was often no one able to teach braille music.
- iii. ‘Score reading and anything which is more visual can be a problem sometimes.’
- iv. Several indicated that it was difficult to communicate with some music teachers, owing to the lack of students’ understanding of printed notation and visual scores etc. on the one hand, and to teachers’ lack of knowledge and understanding of braille users’ needs and difficulties on the other.
- v. Several students felt isolated as the only VI student in a large school, having ‘nobody with whom to converse about problems (to be faced)’.
- vi. ‘Many students take music as a subject who do not want to do music – to get out of another subject (which) causes disruption and interruptions to teaching.’

Comments and Suggestions

- i. One student would appreciate improvements in choir, organisation of the school’s music department and forward planning for securing music literature in braille.
- ii. One commented that ‘choir [was] difficult without parts [and that she] felt much more a part of it at Braille Music Camp.’
- iii. Two found practical experiences much easier than the theory.

Summary of Student Survey

The overall impression gained from the student survey was that mainstreaming offers advantages for some students in the range of experiences and opportunities available. In many situations, there was an obvious deficit regarding specialised teaching, knowledge, understanding and resources and extension of the more musically competent visually impaired students.

Students in private or church schools, as well as those in remote areas, or students integrated in their own local schools (frequently being the only visually impaired student there), often had increased difficulty owing to isolation. Furthermore, every school has its own preferred textbooks, set musical works and so on. The author feels these are

among the major disadvantages of mainstreaming, as they necessarily require enormous duplication of resources and expertise which in practice generally means compromise and restrictions, or else too great an expense.

Survey of Teachers

The following comments were gained from general discussions with some instrumental, primary and advisory teachers and written responses received from the two classroom music teachers at Cavendish Road State High School. A Secondary Special Education Unit is situated in this school, currently catering for about 30 visually impaired students from years 8 to 12.

Data gathered from teachers are summarised as follows:

(1) Effects of Blind/Low-Vision Students on Mainstream Music Teaching

The degree of difficulty experienced seemed to depend on student competency and the level of students' commitment. 'If [students are] prepared to be responsible for themselves, then [there is] no real problem.' The main difficulty related to resources and being adequately prepared ahead of time – e.g. with work-sheets, sight-reading exercises, scores and parts which need to be brailled or photo-enlarged.

(2) Prior Information and Teacher Preparation and Training

Few mainstream or instrumental teachers have prior knowledge, information or training regarding specific needs and difficulties experienced by blind and low vision students. It was generally felt that it would probably help to be able to read or at least have a conceptual knowledge of braille music – 'e.g. to gain [a] better idea of how well students understand notation'.

One teacher suggested that a workshop on how music notation is brailled could be helpful.

Preparation of mainstream music and instrumental teachers to deal with the particular needs and difficulties of visually impaired students was felt to be inadequate and often non-existent.

(3) Availability of Teaching Resources and Support Services

Teachers considered that more special teaching resources and, in many cases, specialist support services, were required.

(4) Opportunities for Student Involvement

The high school teachers felt all visually impaired music students had opportunities to participate in High School music activities (choir, ensembles, band, orchestra, musicals, etc.) and, in fact, most did participate.

(5) How Well Students Cope

Teachers surveyed felt that students coped well on the whole, but some tended to use the excuse of their disability for not being able to complete work when it comes to assignments or compositions. On this point, the author observes that such students demonstrate similar behaviour or failings in other subject areas, too.

(6) Advantages and Disadvantages of Mainstreaming

With regard to teachers' views on advantages and/or disadvantages of integration or mainstreaming in the music education and general musical activities and involvement of blind and low vision students, the main problem concerned the amount of forward planning necessary in order that these students have more equal opportunities. A well-planned curriculum would offer many solutions regarding resources, and a new curriculum is near completion at Cavendish Road State High School. One high school teacher

felt that one definite advantage was that many of the visually impaired students have musical skills and abilities which benefit the others in the class.

Summary of Teacher Survey

The author realises that the teacher survey is very limited and looks forward to opportunities to survey teachers much more widely, including interstate, in the future. Much more liaison, resource provision, advice and training would appear to be necessary.

Conclusion

This discussion has been based on the premise that music is both historically, and still in reality, a viable and important pursuit for the visually handicapped both as a valuable means of recreation, self-expression and therapy and as a vocational opportunity in a variety of ways. Evidence points to there being a significant number of musically gifted blind students whose musical needs are not being adequately met by the prevailing trend of mainstreaming. On the one hand, the therapeutic virtues of musical involvement, appreciation and participation are often not being fully addressed, while, on the other hand, pre- and in-service teacher training and the availability of skilled specialist servicing and necessary resources are far from adequate.

Mooney (1972) states that one of the most important factors in successful integration into a class is the teacher's own attitude towards the child and his/her handicap. The child must be considered first, the lack of sight afterwards. At the same time, the student needs personal discipline in order to excel and the teacher must make full use of the student's talent and expect the best he/she can give.

Lam and Wang (1982) stress that it is essential to provide extensive educational opportunities for the handicapped child at an early age and above all, in a normal environment. Hence, the teacher is challenged to achieve three important objectives: firstly, to develop the child to his/her fullest potential – equipping the student with skills which will eventually help to overcome or by-pass his/her own handicap; secondly, to direct effective learning experiences to the class as a whole, and thirdly, to ensure that handicapped children are accepted and treated by their peers as ones whose needs and behaviours are the same.

As teachers of the visually impaired, we must strive towards as high a level of musical independence for our students as possible. This necessitates teaching concepts of staff notation along with the braille music code so that students can comprehend the sighted musicians' and teachers' language and concepts, in the classroom, in playing with other musicians, and later, as a music teacher or instrumentalist. A theoretical understanding is necessary from the early stages, particularly since braille music is presented in a linear fashion, there being no visual or spatial relationship between pitch and symbol. The ear and memory must be trained and all modes of learning fully utilised – some rote learning, some use of recordings for learning music where appropriate (perhaps with parts taped slowly with some verbal input), the use of photo-enlarged manuscript and notation or 'bold notes' music where suitable, and, of course, braille music. Music literacy, be it via print or braille, is essential in the development of the independent study habits so necessary for more advanced and tertiary studies and the satisfying use of music recreationally.

'There is no doubt that there are many visually handicapped young musicians who are musically and personally deserving of good training at all levels. There is no doubt that . . . teachers in schools could adopt programs designed to develop the talent of these people . . . Attention must now be given to extending the availability and quality of training of those who are visually handicapped and musically gifted.' (Shepherd and Simons, 1970, p. 81).

References

- Burrows, Anne and Krolick, Bettye (1984). *Music Through Braille* (Final Report). Alberta Department of Education, Edmonton.
- Kersten, Fred (1981). Music as Therapy for the Visually Impaired. *Music Educators Journal*. 67(7): 63-5.
- Lam, Rita C. and Wang, Cecilia (1982). Integrating Blind and Sighted Through Music. *Music Educators Journal*. 68(8): 44-5.
- MacLeod, Vera (1987). The Teaching of Music to Primary Children in Schools for the Visually Handicapped Compared With Mainstream Schools. *British Journal of Visual Impairment*. 5(3): 99-101.
- McReynolds, James C. (1988). Helping Visually Impaired Students Succeed in Band. *Music Educators Journal*. 75(1): 36-8.
- Mooney, Muriel K. (1972). Blind Children Need Training, Not Sympathy. *Music Educators Journal*. 58(8): 56-59.
- Shepherd, Louis T. Jr. and Simons, Gene M. (1970). Music Training for the Visually Handicapped. *Music Educators Journal*. 56(6): 80-81.
- Steele, Anita Louise and Crawford, Celeste (1982). Music Therapy for the Visually Impaired. *Education of the Visually Handicapped*. 14(2): 56-62.
- Zinar, Ruth (1978). Music in the Mainstream. *Teacher*. 95(7): 54-6.