

Music in the Education of Children with Severe or Profound Learning Difficulties: Issues in Current U.K. Provision, A New Conceptual Framework, and Proposals for Research

ADAM OCKELFORD

*Royal National Institute for the Blind,
224 Great Portland Street, London, U.K., W1N 6AA*

E-mail: aockelford@rnib.org.uk

Abstract

Little is currently known about the provision of music in the education of children who have severe learning difficulties (SLD) or profound and multiple learning difficulties (PMLD) in the U.K., and virtually nothing about the broader place of music in their lives. The inadequacy of this position is compounded by the fact that there is a lack of conceptual clarity as to what constitutes music education for this group as opposed to music therapy. To elicit – and hopefully to inform – future debate, this article develops a new model of music education for those with SLD and PMLD which has two strands: activities that are undertaken primarily for their intrinsic musical value, and those which are intended principally to promote wider learning and development. The validity of this framework is explored in the context of the broader experience of music in the lives of children with severe and profound learning difficulties and, in particular, it is analysed in relation to the role of music therapy. It is suggested that some of the work currently undertaken by music therapists with children with learning difficulties could reasonably be defined as “educational”, while much of the activity of music teachers with these pupils has a high therapeutic content. Finally, new research is proposed to identify the music provision that currently exists in special schools, and to assist in further clarifying the distinction between education and therapy in this context.

Introduction

The terms “severe learning difficulties” (“SLD”) and “profound and multiple learning difficulties” (“PMLD”) are widely but inconsistently used by those working in the field of special educational needs in the U.K. Generally speaking, however, children with these disabilities have global developmental delay, and are likely to display severe or profound cognitive impairment, with difficulties in controlling movement, processing sensory information, communicating, and interacting socially. Extrapolation from available data (supplied by the Department for Education and Employment) suggests that there may currently be as many as 40,000 children of school age in the U.K. with SLD or PMLD (around 0.5% of the total). Neither the population, nor the way it is conceptualised, is stable. For example, continuing advances in medical treatment and care mean that young people who would not previously have survived, through severe congenital malformation, illness or injury, are now doing so; while conditions such as “autism” are increasingly recognised as affecting children across the spectrum of intellectual ability.

Educational provision for pupils with special needs has changed substantially in recent years too – and the transformation continues. The statutory entitlement of children with profound learning difficulties to education is relatively recent, and occurred following the Education (Handicapped Children) Act 1970 and the Education (Mentally Handicapped Children) (Scotland) Act 1974. Today, despite the move to inclusion, first envisaged as “integration” in the Warnock Report (1978), enshrined in the 1981 Education Act, and reaffirmed in subsequent legislation and Government documentation, the majority of children with SLD and PMLD are still educated in special schools. Across the U.K., there are approximately 600 schools which cater specifically for children with severe learning difficulties (where most youngsters with profound disabilities are educated too). There are around a further 200 schools for children with other special needs such as motor impairment, hearing impairment, visual impairment, language disorders, or who are epileptic or “delicate”, many of which make provision for pupils with SLD or PMLD.

The evidence of Ofsted reports (which are all published on the internet) suggests that the quality of education offered by special schools varies considerably. Moreover, since the notion of educating children with severe and profound learning difficulties is relatively recent, and since there are comparatively few children with this level of disability, there is not the broad-based accumulation of knowledge to which teachers working with able-bodied pupils have access. Hence new techniques and ideas for educating children with SLD and PMLD are being developed and disseminated all the time.

In 1992, the Royal National Institute for the Blind (R.N.I.B.) set up a Music Education Advisory Service to support visually impaired children (including those with other disabilities), their families, and the professionals who work with them. From the hundreds of contacts the Service has had in the last eight years, it is evident that there is a widespread belief that music has a special value for children with disabilities – both as a unique medium of self-expression, and as a means of promoting wider learning, development and well-being. However, there is no information nationally as to what music provision is made for this group, although it is clear that there are two main forms of professional input: music therapy and music education. Anecdotal evidence, gleaned from R.N.I.B.’s wide-ranging formal and informal contact with special schools across the country, indicates that the provision of music therapy varies considerably: some establishments have none at all, others use music therapy to complement the music-educational curriculum, and at least one school regards music therapy *as* the music curriculum. However, it is unclear how these different models are distributed across the 800 or so schools in the U.K. In terms of music education, it appears that provision is patchy, ranging – to use Ofsted’s terminology – from “excellent” (where, for example, there is appropriate input from a music specialist, who co-ordinates the involvement of other staff, together ensuring that music functions as a coherent strand in the wider curriculum) to “very poor” (where, for example, a music specialist is not available, and other staff do not engage with the children in musical activities). This is despite the fact that all pupils in England and Wales are entitled to music education as part of the National Curriculum at Key Stages 1, 2 and 3, covering the age-range 5–14 – although this is of little practical relevance to many

children with SLD and PMLD, for whom no suitable, nationally recognised music curriculum currently exists.

Given this diversity of provision, it is perhaps unsurprising that there is a general lack of clarity as to what can reasonably be considered to constitute music *therapy*, as opposed to music *education*, for pupils with severe, or profound and multiple learning difficulties. If anything, the prevalent view seems to be that music *therapy* is the appropriate term to use for structured musical activities undertaken with this group. Certainly, the music-therapeutic literature describes a broad range of activities and potential benefits to children with learning difficulties. For example, Nordoff and Robbins (1971) reflect on how some of the children they worked with learnt “new activities, new words, new music”, and became more responsive to other people (p. 123); how a young girl began to develop speech through music therapy (pp. 30–31); and how music even assisted an autistic boy develop independence skills (p. 105). Postacchini, Borghesi, Flucher, Guida, Mancini, Nocentini, Rubin and Santoni (1993) discuss how music therapy sessions with a five-year-old girl with severe infantile regression were thought to improve, among other things, her movement and use of vision, and assist in her evolution from pre-symbolic to symbolic communication. Among the aims of music therapy that Bunt (1994) lists in working with a nine-year-old boy with learning difficulties are: “to help develop auditory awareness and memory” and “to help develop his ability to share” (p. 105). Schwalkwijk (1994, pp. 79ff) discusses the potential role of music therapy in the stimulation of motor and cognitive skills.

Yet do these accounts accord with definitions of music therapy given by therapists themselves? Bruscia (1987, p. 47), for example, states: “Music therapy is a systematic process of intervention wherein the therapist helps the client to achieve health, using musical experiences and the relationships that develop through them as dynamic forces of change”. Bunt (1994, p. 8), in referring to this definition and others, concludes that: “Music therapy is the use of organised sounds and music within an evolving relationship between client and therapist to support and encourage physical, mental, social and emotional well-being”. When these aims are compared with the accounts of music-therapeutic activities given above, it is evident that some therapists working with children with learning difficulties have strayed from fostering “well-being” through music into what may reasonably be considered areas of education – promoting learning and development, for example – where, as we shall see, music can fulfil a range of functions. Indeed, the leaflet *Music Therapy in the Education Service* (published by the Association of Professional Music Therapists – A.P.M.T., 1992), is quite explicit about the role that music therapists can assume when working in the domain of education, where therapy is held to be a valuable means of facilitating access to the music curriculum (p. 1). A further example of the conceptual confusion felt even by some therapists themselves, is the fact that Elaine Streeeter’s monograph *Making Music with the Young Child with Special Needs* (1993) is categorised by the British Society for Music Therapy as a “music therapy book” (B.S.M.T., 1998, p. 21), and by the A.P.M.T. as a book about “music in special education” (as opposed to music therapy); *op. cit.*, p. 32.

Why should therapists be involved in educational activity? Contributory factors include the fact that those working in music education at all levels have been

comparatively inactive in the field of special needs: taking on pupils with learning difficulties is not something that the majority of teachers have in the past seen as part of their role, and although this is changing with the increasing inclusion of children with disabilities in mainstream schools, those with SLD and PMLD are likely to continue to be educated in special schools for some time to come. Moreover, relatively little has been written on music education for children with disabilities, and the works that do exist – the more venerable of which are now outmoded in many respects – make little or no reference to those with severe or profound learning difficulties; see, for example, Dobbs (1966), Bailey (1973), Dickinson (1978), Wood (1983/1993) and Childs (1996). Finally, while there are a number of nationally recognised courses in music therapy, there is currently no comparable training in music education available for those who wish to work with children with SLD or PMLD.

The next section of this paper sets out the elements that I believe may constitute effective music educational provision for young people with SLD or PMLD, before examining how these relate to the perceived aims, role and activities of music therapy. However, an analysis that considered only these two areas of professional concern would be inadequate, since therapy and education are likely to make up only a small portion of a child's musical experiences. For young people with severe or profound learning difficulties – as for all children – music is likely to occur in a range of contexts, fulfil a number of functions, and embrace a wide diversity of activity. The following table offers an indicative summary of what musical activities may occur, where, with whom, and upon whose instigation.

This shows that music therapy and education are only details on a far broader canvas of musical experience, much of which is likely to occur on a casual, unplanned basis, and whose totality has never been evaluated. Critically, many of the children concerned will not be functioning at a level where the conceptual distinctions drawn here have any meaning or relevance; for them, the incidental input from, for example, the radio played in the taxi to and from school for an hour or so each day, or the succession of television theme tunes that consistently map out their evenings, may constitute by far the most significant musical experiences of their lives. Hence it would seem essential that any consideration of music provision for children with SLD or PMLD that lays claim to ecological validity or to be comprehensive, must take a holistic view; and it is in this spirit that the following model is constructed.

A Model of Music-Educational Provision for Children with SLD and PMLD

Ockelford (1998) proposes that music education for children with severe or profound and multiple disabilities should be considered as having two distinct strands: activities which are undertaken primarily for their intrinsic musical value, and those whose main function is to promote wider learning and development.

Strand 1 – “Music in its own right”

Music has found a place in every society, and enhanced the lives of countless millions of people; by common consent, it is there to be enjoyed by all,

TABLE I
The place of music in the lives of children with severe or profound and multiple learning disabilities.

Activity	For whom?	Where?	Provided by	Organised by
Class music sessions (may be National Curriculum)	Class (children with SLD or PMLD)	School	Class Teacher; Music Co-ordinator	Music Co-ordinator
Music for wider learning and development	Individuals or groups (with SLD or PMLD)	Largely in school (possibly at home)	Class Teacher; Learning Support Assistant; other	Any lead professional
Specialist instrumental or singing tuition	Individuals (with SLD)	School; home; other	Specialist music teacher	Music Co-ordinator; parents
Music therapy sessions	Individuals or groups (with SLD or PMLD)	School; music therapy centre	Music therapist	Music Co-ordinator; parents
Taking part in special musical events	Individuals or groups (with SLD or PMLD)	School; in the community	<i>Eg</i> education section of professional group	School; parents; voluntary agency
Listening to live music (concerts, <i>etc</i>)	Individuals or groups (with SLD or PMLD)	School; community; concert venues, <i>etc</i>	Performers (amateur or professional)	School; parents
Listening to recorded music for leisure	Individuals or groups (with SLD or PMLD)	Largely at home (possibly in school)	Performers (amateur or professional)	Parents; carers; others
Incidental musical experiences	Individuals (with SLD or PMLD)	Anywhere (and almost everywhere)	Various	No-one

irrespective of their abilities or needs. It provides a potentially powerful medium of self-expression and communication with others. Specifically, through the National Curriculum in England and Wales, children with learning difficulties are *entitled* to an appropriate music education, just as their able-bodied peers are. However, the special resources and expertise required to enable children with severe or profound learning disabilities to engage in fulfilling musical experiences is a challenge which the education system has, in large part, yet to address. Here are some of the factors that such a development would have to take into account.

Listening, responding and reflecting

Since hearing typically starts to develop in the human foetus four months or so before birth, by the time they are born, babies may be particularly sensitive to sounds with which they have become familiar in the womb and prefer them to others: their mother's voice, for example, the language she speaks and certain pieces of music (see, for example, Lecanuet, 1996). Hence those with severe or profound learning difficulties, whose global development may be at a very early stage, may nevertheless be able to process some musical and other organised sounds quite effectively. It is important, therefore, that children with SLD and PMLD have access to a rich variety of listening experiences, both within school and beyond, to enable their listening skills to develop as far as possible, and, above all, for the pleasurable sensory and emotional responses that music can engender.

Inevitably, these responses will vary. At the most basic level, for example, loud sounds tend to be arousing, while quiet ones have a calming effect; high notes may cause tension, whereas low ones foster a feeling of repose; fast tunes usually have energetic connotations, while slow ones are more restful (see Davies, 1978, p. 106). Since reactions such as these are found in new-born babies (Hargreaves, 1986, p. 62), it is reasonable to expect similar responses in pupils with severe or profound learning difficulties who are functioning at this developmental stage or beyond it. Other emotional responses to music may derive not intrinsically (from the qualities of sounds themselves) but through association with a particular event, activity, person or place (see below). For example, a "goodbye" song, used consistently at times of parting, may come to evoke a feeling of sadness in its own right. For most people, though, the emotional impact of music, while potentially embracing these two basic forms of response, involves higher-level processing too. This is stimulated by music's abstract patterns in sound, which, according to Meyer (for example, 1973) and subsequent theorists, set up certain expectations and tensions in listeners who are familiar with the style. Depending on how these are realised or resolved, or fail to be, different affects are created. However, to be able to react in this way requires a subconscious understanding of how music is structured, as well as the capacity for sophisticated emotional response, and it is likely that these qualities will still be evolving in many children with severe or profound learning disabilities. Inevitably, this will be reflected in the nature of their reaction to music.

The capacity of children and young people who have SLD or PMLD to reflect consciously on music will depend on the extent of their listening experience, their capacity to respond, and, if their views are to be shared with others, their ability to communicate. These qualities may well evolve through structured opportunities for musical reflection. In the absence of spoken language, children's responses

may take the form of vocalisations, movements, “stilling” or other overt expressions of contentment or displeasure. Interpreting such signals correctly – imbuing them with the appropriate communicative intent – may take time and a special sensitivity on the part of teachers and carers. Meaning may even vary with context: the same agitated gesture that generally indicates “I like that” may also mean “No thank you!” on some occasions. The key thing, particularly for children with profound and multiple disabilities, is that individual predilections and interests should inform the planning of music programmes, ensuring the best possible match between learning preferences, needs and the curriculum.

Creating, causing and controlling sounds

Creating, causing and controlling sounds through the exploration of musical instruments, the voice and other sound-makers are activities of potential relevance and interest to the great majority of children who have learning difficulties, including many of those who are in the very early stages of development, and opportunities should be given for young people to participate in an appropriate range of music-making activities, which facilitate self-expression in sound and communication with others. However, competence in areas such as performance, improvisation and composition – in the sense of having the capacity to plan and reproduce series of sounds faithfully to an inner intention, in emulation of what is heard, or through instruction – is characteristic of rather fewer pupils and students. Making music in this sense requires a cluster of abilities, including a sufficient level of auditory development to process pitch, rhythm and other qualities of sound effectively; a range of motor skills, co-ordinated with what is heard; concentration, memory, imagination and motivation; and, in many cases, an awareness of the presence, needs and expectations of others.

These qualities may be found in some youngsters with learning difficulties, whose attainment in music is commensurate with their general level of functioning. For others, however, the situation is more complicated since the attributes that together comprise “musicality” may, to a certain extent, develop and function independently of each other and independently of other abilities, such as the capacity for using verbal language. Hence, children may well have uneven profiles of development, both within the domain of music, and when gauging musicality in the context of more general skills. Discrepancies between different areas of attainment may arise from a number of sources. For example, a physical impairment may constrain the potential for technical accomplishment, vocally and instrumentally, while a hearing impairment may interfere with the evolution of auditory perception. Some children may develop an exceptional skill or skills in the context of learning disabilities – so-called “savants” (see, for example, Hill, 1974; Judd, 1988; Miller, 1989; Ockelford, 1998).

Strand 2 – “Music to inform wider learning and development”

However, savants are the exception rather than the rule. For the great majority of children with SLD and PMLD, who are functionally very young, music may not yet be a discrete phenomenon. It may not be perceived as a distinct strand amid a welter of other sensory stimuli, and may not even be distinguished from other forms of auditory input, such as speech and everyday noises. This has two

implications. First, the fact that music tends to be part of larger experiences can be turned to advantage by using music consistently to help *structure* those experiences. Second, since the generally accepted definition of music may be too limited to be of relevance to young people with severe or profound disabilities, it makes sense for teachers to embrace a broader concept too. In the present context it seems reasonable, therefore, to define “music” as self-expression in sound that usually seeks to communicate (excluding speech and other formal language), and to consider it alongside other forms of organised sound.

Since making music is dependent on a number of attributes in addition to the perceptual skills directly associated with the processing of sound, musical activity can promote a wide range of learning and development. For example, performance, at any level, may well enhance fine motor control and co-ordination, while playing or listening engage cognitive skills such as concentration and memory. Music can offer invaluable support in the early stages of language acquisition. Group sessions potentially provide a context and structure for socialising, and participation may heighten a child’s awareness of self and other, foster tolerance, and enable individuals to contribute to a larger whole. Hence, just as literacy and numeracy permeate mainstream curricula, underpinning many areas of study, so music can inform the wider curriculum of children who have severe or profound learning difficulties. Four main areas are considered here: “music and movement”, “music and learning”, “music and communication” and “music and socialisation” (adapted from Ockelford, 1998). Musical examples are taken from *All join in! – a framework for making music with children and young people who are visually impaired and have learning disabilities* (Ockelford, 1996).

Music and movement


Children’s body awareness, and the control and co-ordination of a wide range of movements can be fostered through playing instruments and other sound-makers, the will to move deriving from the desire to produce a certain sound. For many youngsters with SLD or PMLD, who find movement enormously challenging, specialist switching devices such as MIDI-compatible ultrasonic beams may provide a necessary interface, since through these there is no direct link between the nature of the movement made and the sound that is produced; *any* movement can cause or control *any* sound. Conversely, the movements children make in *response* to music may be freely expressive, or characteristics of the piece they are listening to may determine, more or less specifically, the actions that accompany it. That is, music can provide an “auditory frame of reference” for movement – something that may be particularly significant for those who have difficulty in making sense of visual information, to clarify what may be a confusing picture of events. The strongest link between music and movement is found in rhythm, which sets the pace for action. For example, in *To and fro* (*All join in!* – Song 9), the first beat of each bar alternately marks the extremes of vacillating movements such as rocking, waving, swinging, swaying or nodding.

This tendency is emphasised by the structure of the melody, built on motives that repeat at the bar. Here there is a direct relationship between the tempo of the music and the speed of movement. Other connections are possible too. For example, loud sounds may be associated with large movements and quiet sounds

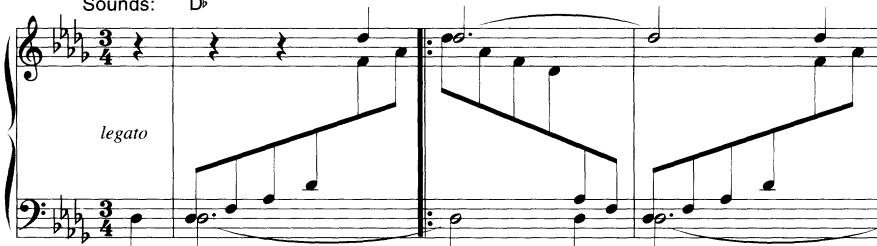

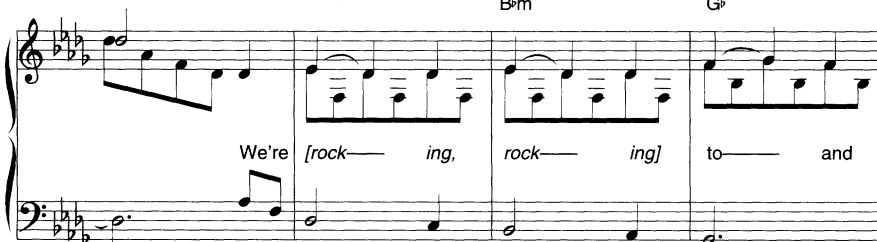

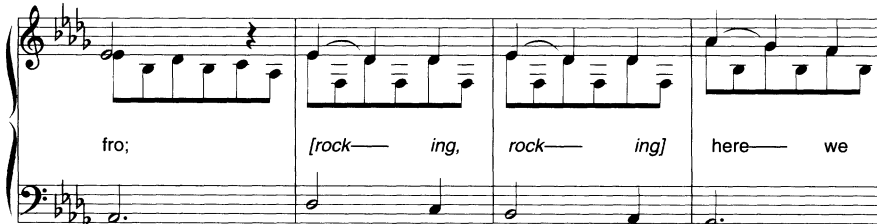
with small ones. Links such as these may largely be attributed to the experience of playing instruments, where there is an immediate connection between the effort that is applied and the volume of sound produced. A rise in pitch is widely considered to correspond to movement in an upward direction, and *vice versa* – something that is exploited, for example, in *Up and down (All join in! – Song 12)*.

9 *To and fro* Tracks
9 33 55

Flowing Guitar capo 1st fret This arrangement is compatible with Tracks 9, 33 & 55

Fingered: C 

Sounds: D^b

The musical score consists of three systems. The first system shows guitar chords G (A♭), Em (Fm), Am (B♭m), C7 (D♭7), and F (G♭) above a piano accompaniment with lyrics: "go, so smooth— and slow; we're [rock — ing,". The second system shows guitar chords Em (Fm), Am (B♭m), Dm (E♭m), G7 (A♭7), and C (D♭) above a piano accompaniment with lyrics: "rock — ing] to— and fro.". The third system shows a piano accompaniment without lyrics.

© Adam Ockelford, 1996

EXAMPLE 1

While this correspondence is generally conveyed through the more or less conscious efforts of teachers and others, there is some evidence that it also occurs as a natural part of the way thinking develops (Welch, 1991). Whatever their root, the power of associations between sound and movement can be considerable. Hence they are a potentially valuable tool in working with children with learning difficulties.

12

Up and down

Tracks
12 36 59

Smooth but rhythmic

This arrangement is compatible with Tracks 12 & 59

Chord diagrams: B, E, F#7, B, E

Go— up and down, go

The first system of musical notation for 'Up and down' is in the key of D major (two sharps) and 4/4 time. It consists of a treble and bass staff. The treble staff contains the melody with lyrics 'Go— up and down, go'. The bass staff provides a rhythmic accompaniment. Above the treble staff are five guitar chord diagrams for B, E, F#7, B, and E.

Chord diagrams: B, E, B, E, B

up and down. Up and down, and up and

The second system of musical notation continues the piece. The treble staff has lyrics 'up and down. Up and down, and up and'. The bass staff continues the accompaniment. Above the treble staff are five guitar chord diagrams for B, E, B, E, and B.

Chord diagrams: E, C#m, F#7, B, E, F#7, B

down. Up and down.

The third system of musical notation concludes the piece. The treble staff has lyrics 'down. Up and down.'. The bass staff continues the accompaniment. Above the treble staff are seven guitar chord diagrams for E, C#m, F#7, B, E, F#7, and B.

© Adam Ockelford, 1996

EXAMPLE 2

Music and learning

Music and other organised sound can be used to promote the acquisition of skills, knowledge and understanding in a number of ways. These include using music and other structured auditory input to enhance sensory information obtained

from the environment; the direct transfer of perceptual and cognitive skills from musical contexts to other spheres of activity; isolating selected qualities of sound and treating them as concepts to be manipulated in pursuit of educational goals beyond music; and regarding pieces of music as potential sources of information about the cultures in which they were created.

Many children with severe or profound learning difficulties have difficulty in making sense of what they see and hear, and, we may surmise, are assailed by William James's "buzzing, booming confusion". Hence a helpful strategy for teachers and others to adopt is to simplify the auditory environment by reducing the impact of extraneous sounds which have no long-term place in pupils' learning programmes. Sounds that are important may be enhanced or modified if necessary to make them more distinct (*cf.* Ockelford, 1993). Extra sounds may be incorporated into the environment to make it easier to understand: for example, a room may be identified with a distinctive set of windchimes suspended in the doorway, or areas used occasionally may be characterised by a particular piece of music playing in the background. In the longer term, this may have the additional advantage of providing emotional security through familiarity. Some activities may consistently be accompanied by music in an appropriate style too; and key individuals may wear carefully selected bangles or jangling bracelets, serving to augment their presence in sensory terms.

Attending purposefully to music engages a range of perceptual and cognitive functions, which usually operate subconsciously. Some, such as identifying similarities, trends and patterns among stimuli, and assigning them to groups and hierarchies, are characteristic of perception in other domains too. The development of these abilities in relation to music appears largely to be bound by that context, though, with no simple crossover to different spheres of mental activity. Cognitive attributes such as concentration and memory, however, which are fundamental to the appreciation of music, may operate in a way which is less domain-specific, and here achievement may transfer more readily to other areas of experience, particularly those which also involve listening (see Overy's discussion note, and her respondents: Rauscher, Spychiger, Lamont, Mills, Waters and Gruhn, 1998). Bunt (1994), for example, cites an extensive study which examined the effects of music therapy on children with learning difficulties, and which indicated that exposure to appropriate musical activities could indeed help children focus their attention and increase their concentration span. As he observes (1994, p. 128): "Over time it appears that a period of music therapy can contribute to a child's increasing ability to sustain and initiate activities . . .".

Children may be encouraged to identify objects through their sound-making qualities and classify them accordingly. For instance, the ringing, bell-like sounds of metal may be contrasted with the more mellow response of wood, and items sorted on this basis. Other concepts can be extracted from the experience of music too. For example, the opposing ideas of "slowly" and "quickly", "start" and "stop", "the same" and "different", "together and alone" (see *All join in!* – Song 16), and "again" and "finished" (*All join in!* – Song 23) are integral to musical structure and performance. Number features widely in music (Ockelford, 1993), and it can be isolated as a concept in several ways. For example, children can consider the number of times a tambourine is tapped in a repeating pattern (1, 2, 3, ...

1, 2, 3, ...); the number of beats there are in a bar, and the number of verses in a song; the number of times a chorus is repeated, the number of different instruments that are used in the course of a piece, and the number of people who are playing or singing at the same time.

All pieces of music and musical instruments are ultimately products of the society in which they originate, and offer a rich source of cultural information for people who have learning difficulties. Depending on their level of understanding, children's experience of pieces of music as artefacts may range from simple exposure to discussion at some level about their construction, how this relates to the structure of other works, to other spheres of artistic endeavour, and more broadly to the historical and geographical context in which a given composition was created.

Music and communication

For children with severe, or profound and multiple learning difficulties, music can promote communication in a number of ways. For example, just as in everyday life music and other organised sounds, ranging from the signature tunes of radio and TV series to church bells and the referee's whistle in sport, typically fulfil a range of symbolic functions, so for young people with SLD and PMLD, there are various categories of day-to-day information that can profitably be symbolised in sound, including *activities, places and people* (cf. Ockelford, 1994). Sound-symbols can relate to these areas in two ways. There may be a direct link, where a sound is *integral* to a given activity, for instance, such as a small cluster of bells being used to represent a music session. Other sound-symbols work through being *associated* with the activity concerned, and so operate at a more abstract level. For example, a horn may be taken to mean "ride the bike". This type of connection can also be applied to places and people. For instance, the windchimes chosen to help characterise a room may also be used to represent it symbolically, while the jangling bracelets or bangles worn to enhance the individuality of key figures in a child's life (see above) may acquire referential status too. Once children have become familiar with receiving information through sound-symbols, to indicate what is going to happen next, for example, they may be encouraged to use them in an expressive way. Pupils may be able to choose the next activity for themselves, for example, from a selection that is offered (see Ockelford, *op. cit.*, p. 22).

Music and words are closely linked products of the human psyche, enjoying a special relationship that, from time immemorial, has found expression in songs and chants (cf. Aiello, 1994). This affinity can be particularly useful in promoting communication among children with SLD and PMLD. In the early stages of development, for example, exposure to music may elicit vocalisation (see Moog, 1968/1976), and those working with youngsters with special needs may exploit this tendency to promote the production and control of vocal sounds. At more advanced levels of functioning, music can play a significant role in motivating children to use language, through the many songs that have been especially written or have evolved over the years for their edification and pleasure. Whether nursery rhymes or counting songs, playground chants or action songs, game songs or songs that tell a story . . . music adds another dimension to the verbal messages presented,

enlivening everyday expressions and imbuing them with extra colour and interest.

Music can also help to *structure* language. This may be particularly important for children with learning difficulties, who may often have to contend with an unnecessarily baffling array of different words and phrases from adults who, in the face of little or no immediate reaction from those they are addressing, are culturally programmed not to repeat themselves. If at first you don't succeed in being understood, there is a strong inclination to try again, using alternative means of expression. Experience of special schools suggests that scenarios such as the following, in which an adult is addressing a child, are not untypical: "It's time for lunch . . ."; *pause; no response*. "Come and get something to eat"; *longer pause; still no response*. "Aren't you hungry? – I expect there'll be something nice for us today . . ."; *further pause, then, encouragingly*: "Come on . . . food! My tummy's rumbling, isn't yours?"; *final check for any response, then*: "Ready then? Off we go . . .". Yet what the child seeking order and regularity may need most is simplicity and consistency. Here, music can help. By allocating important words and phrases short tunes of their own, the consistent delivery of key messages is assured. Moreover, one form of complex auditory input (speech) is supplemented with a simpler overlay (melody); the message is given a stronger identity, which is consequently more memorable, and which children may find easier to recognise. For example:



Now it's time to get your lunch.

EXAMPLE 3

That is not to say that carefully structured fragments such as these should be all that is communicated, but that they should form salient features in a rich and diverse landscape of multisensory interaction.

Repetition underlies all musical structure (Ockelford, 1991), and is common in words set to music, but rare in speech alone (*cf.* Monelle, 1992). Clearly, however, repeating key words and phrases is potentially of great assistance to those striving to understand symbolic vocal communication, and the songs of *All join in!* are constructed with this in mind. See, for example (*Goodbye* – Song 24), which repeats the word "goodbye" six times. (An optional harmonic framework for improvisation offers variety for those who want it.)

Some children who are normally unable to speak or who find it difficult to produce speech sounds accurately may nevertheless be able to communicate through *singing* words and phrases, or at least intoning them within a rhythmic structure, since music and speech are processed differently in neurological terms. For example, Anastasi and Levee (1960, p. 696), in their report on a musical savant "S", observe that "before he could talk, S was able to hum tunes he heard on the radio or phonograph. To capitalise on this propensity, a speech therapist was engaged and

24 *Goodbye* Tracks
24 48 69 70

Thoughtful

This arrangement is compatible with Tracks 24, 48, 69 & 70

The musical score is presented in three systems, each with guitar chord diagrams above the staff and piano accompaniment below. The lyrics are written under the vocal line.

System 1: Chords: Dm7 sus4, Dm7, Gsus4, G, C, C9, C. Lyrics: Good-bye, — good-

System 2: Chords: Am7, F7, G7, C sus4, C, F, Em, Am. Lyrics: bye, — good — bye — a — gain. We'll see you [to — mor-row], and

System 3: Chords: Dm7, G, C, Cmaj7, Fmaj7, C, Em, Am, Am7, Dm sus4, C, G7, C. Lyrics: so un — til then, good-bye, — good-bye, — good-bye — a — gain.

© Adam Ockelford, 1996

EXAMPLE 4

S was eventually taught to talk through the medium of lyrics. To this date, a sing-song quality is discernible in his speech.” At a basic level, teachers may encourage some children to communicate through fragments of melody such as the following:



[No thank - you!]



[Yes please!——]

EXAMPLE 5

The intention is for the rhythm and the shape of the tunes to hold things together, and even if individual vowels and consonants are not quite as standard, other people will be able to understand what is meant.

Music and socialisation

“Music has many different functions in human life, nearly all of which are essentially social” (Hargreaves and North, 1997, p. 1), and although listening to music, exploring the multisensory properties of sound-makers, singing, playing instruments and inventing new pieces can be satisfactory activities for children to do on their own, music sessions offer a unique and secure framework through which many of the skills and disciplines of social interaction can be experienced and developed. Teachers may provide structured opportunities for children to listen to the sounds that others are making, in a variety of contexts, and to respond appropriately to them. For those in the very early stages of development, such activities may be most effective undertaken on a one-to-one basis, with teacher and pupil working in close proximity, sound featuring as one element in a broader pattern of multisensory contact. Here, there is likely to be an intimate connection between the shared activity and the relationship between child and adult; the one enabling the other to occur and permitting it to evolve. In these circumstances, young people may initiate sound-making themselves, and by offering an appropriate response, teachers can reinforce children’s awareness that what they do can have an effect – contributing, perhaps, to their developing cognisance of a sentient “other” out there. Alternating patterns of sounds and responses may be built up: “proto-conversations”, in which the teacher reacts sensitively to the child’s efforts, promoting interactive play (see, for example, Rødbroe, 1997). In responding to what they hear, children may produce sounds that bear no immediate resemblance to the ones with which they are presented. Teachers may nevertheless copy what their pupils do, encouraging them to do the same, both vocally and using sound-makers, through providing a model of imitation. Initially, two adults may interact in this way themselves, with children listening. Subsequently, teachers may act on behalf of pupils, gradually fading support as the children themselves become active participants.

Some children may be able to participate in more formal sequences of interaction, whose scripts are taken from a standard repertoire. For example, there are many nursery songs and games which set up the expectation that a particular event (such as being tickled) will occur at a given juncture, and others in which the child is required to supply certain features from a familiar selection (for instance, “actions” in *If you’re happy and you know it*; and “animal sounds” in *Old MacDonald had a farm*). Often, the challenge for teachers is in providing material for older children that is appropriate to their age, culture and social background. *All join in!* offers one or two initial suggestions, with songs such as *All join in!* – Song 10, and *Listen!* – Song 14.

Whatever its context and content, music is particularly effective in supporting the development of early social interaction. It is, in every sense, highly repetitive (see above): pieces are generally made up of sequences of identical or similar events, which divide time into manageable chunks, and constitute predictable patterns. Hence, it provides a secure framework for the risky business of reaching out into the far-from-predictable world of other people, setting parameters and establishing the boundaries within which socialisation can occur, and building confidence through a medium which the great majority of young children find enjoyable and motivating.

Re-visiting the Distinction Between Music Therapy and Music Education

Clearly, there is considerable overlap between the activities which constitute music *education* as defined here (strands 1 and 2) and those which constitute music *therapy*, as described above in the practical accounts of music therapists. The position can be represented as follows:

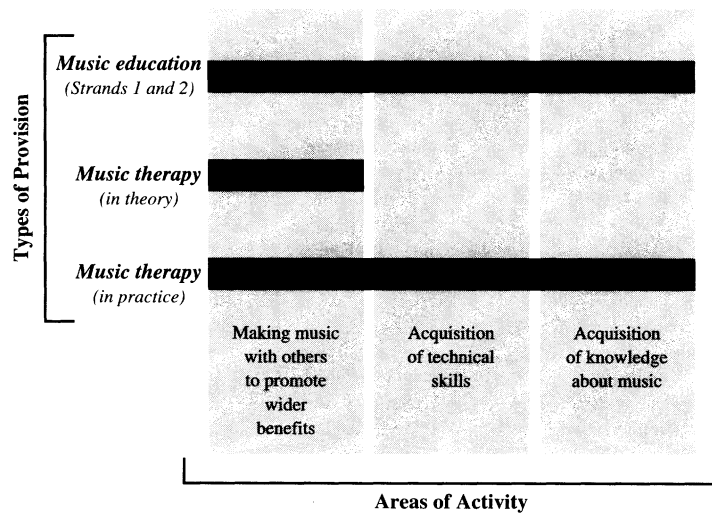


FIG. 1

The relationship between music education and music therapy in terms of activities undertaken.

Hence, it is reasonable to ask whether education is an inevitable part of the therapeutic process for children with SLD or PMLD. Is it ever possible to indulge in music therapy with this group without, at least to an extent, engaging in educational activity too? At the most basic level, how could a child benefit from therapy without some pre-existing skills and understanding (presumably acquired through education, formal or informal)? And is it not reasonable – and indeed desirable – to assume that, in many children, skills and understanding will develop in the course of therapy sessions? Surely, the greater the technical proficiency, the more effectively a child will be able to express herself in music, and the more likely she will be able to attain, albeit transiently, Bunt’s state of “well-being”? Conversely, it seems unimaginable that a child could make educational progress unless she had at least a partial feeling of well-being. And it would appear inconceivable that a teacher could work effectively with a pupil with severe or profound learning difficulties without relating to him closely. Hence, is there not inevitably a therapeutic component in education too?

Perhaps, ultimately, it is a matter of where the priorities of the therapist or teacher lie. As the Association of Professional Music Therapists (1992, p. 39) state: “Children will often acquire certain musical skills in the course of a music therapy programme, such as sensitivity to pitch, rhythmic control, awareness of form, manipulative control, etc. These skills, whilst constituting an important part of the therapy programme, are likely to be secondary to pre-determined therapeutic objectives.” That is, the two disciplines are distinguishable not so much by the nature of the activity that is undertaken than by their underlying aims and intentions.

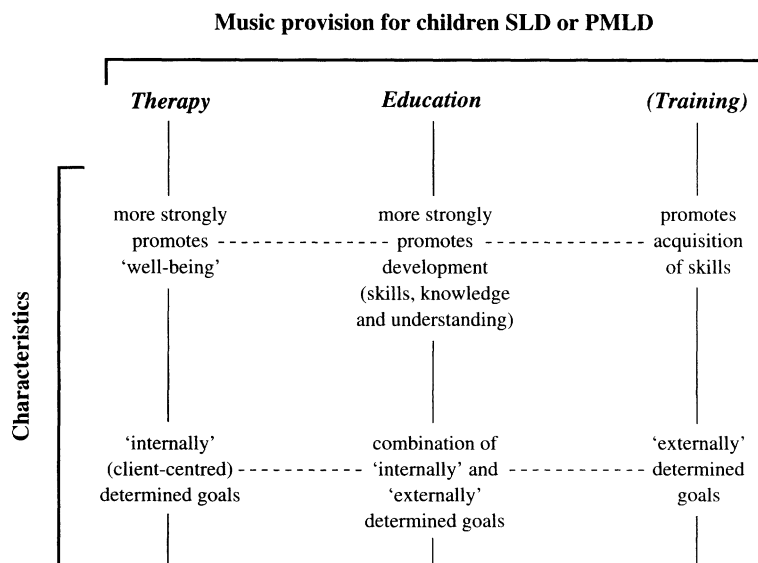


FIG. 2

The relationship between music education and music therapy in terms of starting points and aims.

For example, it appears that music therapy more strongly promotes “well-being”, whereas music education more strongly promotes “development” (of skills, knowledge and understanding); and that therapy has more internally (client-centred) determined goals, whereas effective music education would unashamedly be based on a combination of “internally” and “externally” determined goals.

(As Figure 2 shows, both therapy and education are distinct from “training”, which is solely concerned with the acquisition of externally determined skills.)

Conclusion: the Future

There are a number of steps that could be taken to clarify the issues raised in this paper, and ultimately to improve the provision of music therapy and music education that is offered to children with severe, or profound and multiple learning difficulties in the U.K.

First, there is the need to research what music provision – of all types – currently exists in special schools, and how this relates to the children’s experience of music as a whole. Then, there needs to be research into the relationship between music therapy and music education for children with SLD and PMLD, with the aim of clarifying current and informing future practice. If therapists are indeed doing educational work, it is important that this is acknowledged. Similarly, the therapeutic element of music education should be properly recognised. A further important issue, is how the work of music therapists relates to that of other professionals (including other therapists) and carers (including parents). As shown in Table 1, all and any of the musical experiences of a young person with SLD or PMLD are of potential significance, and therapists cannot hope to work to the greatest benefit of a child in isolation: music education and therapy should be a team effort, with the child at the centre of things, as far as possible taking an active role in decision-making.

Beyond this research, it would be strongly desirable to establish nationally recognised training courses in music education, for music specialists and non-specialists alike, working with children with PMLD and SLD (something proposed by the Teacher Training Agency in the discussion document *National Standards for Special Educational Needs (S.E.N.) Specialist Teachers*, 1998). To support this development, new music-educational materials need to be produced for those working in the field, and for parents.

The ultimate aim should be the establishment of appropriate music provision for all children with PMLD and SLD, to enrich and inform living and learning throughout the school day and beyond.

References

- Aiello, R. (1994). Music and language. In: Aiello, R. (Ed.), *Musical Perceptions*. Oxford: Oxford University Press.
- Anastasi, A. and Levee, R. F. (1960). Intellectual defect and musical talent: A case report. *American Journal of Mental Deficiency*, **64**, 695–703.
- Association of Professional Music Therapists (1992). *Music Therapy in the Education Service (Second Edition)*. Cambridge: A.P.M.T.
- Bailey, P. (1973). *They Can Make Music*. Oxford: Oxford University Press.
- British Society for Music Therapy (1998). *Information Booklet*. East Barnet: B.S.M.T.

- Bruscia, K. E. (1989). *Improvisational Models of Music Therapy*. Springfield, Illinois: Charles C. Thomas.
- Bunt, L. (1994). *Music Therapy: An Art Beyond Words*. London: Routledge.
- Childs, J. (1996). *Making Music: Special Practical Ways to Create Music*. London: David Fulton.
- Davies, J. B. (1978). *The Psychology of Music*. London: Hutchinson.
- Department for Education and Employment (1998). *Meeting Special Educational Needs: A Programme of Action*. London: D.f.E.E.
- Dickinson, P. (1978). *Music with E.S.N. Children*. London: N.F.E.R.
- Dobbs, J. P. B. (1966). *The Slow Learner and Music: A Handbook for Teachers*. London: Oxford University Press.
- Gruhn, W. (1998). Response to Katie Overy's Paper, "Can Music Really 'Improve' the Mind?". *Psychology of Music*, **26**, 208–210.
- Hargreaves, D. J. (1986). *The Developmental Psychology of Music*. Cambridge: Cambridge University Press.
- Hargreaves, D. J. and North, A. (1997). The social psychology of music. In: Hargreaves, D. J. and North, A. (Eds.), *The Social Psychology of Music*. Oxford: Oxford University Press.
- Hill, A. L. (1974). Idiots savants: Rate of incidence. *Perceptual and Motor Skills*, **44**, 12–13.
- Judd, T. (1988). The varieties of musical talent. In: Obler, L. K. and Fein, D. (Eds.), *The Exceptional Brain: The Neuropsychology of Talent and Special Abilities*. New York: The Guilford Press.
- Lamont, A. (1998). Response to Katie Overy's Paper, "Can Music Really 'Improve' the Mind?". *Psychology of Music*, **26**, 201–204.
- Lecanuet, J.-P. (1996). Pre-natal auditory experience. In: Sloboda, J. and Deliège, I. (Eds.), *Musical Beginnings: Origins and Nature of Musical Competence*. Oxford: Oxford University Press.
- Meyer, L. B. (1973). *Explaining Music*. Chicago: University of Chicago Press.
- Miller, L. (1989). *Musical Savants: Exceptional Skill in the Mentally Retarded*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Mills, J. (1998). Response to Katie Overy's Paper, "Can Music Really 'Improve' the Mind?". *Psychology of Music*, **26**, 204–205.
- Moog, H. (1968/1976). *The Musical Experience of the Pre-School Child*. London: Schott and Co.
- Nordoff, P. and Robbins, C. (1971). *Therapy in Music for Handicapped Children*. London: Victor Gollancz.
- Ockelford, A. (1991). The role of repetition in perceived musical structures. In: Howell, P., West, R. and Cross, I., *Representing Musical Structure*, pp. 129–160. London: Academic Press.
- Ockelford, A. (1993). *Sounds Important – The third of five videos and booklets in the series The World in Our Hands*. London: Royal National Institute for the Blind.
- Ockelford, A. (1994). *Objects of Reference: Promoting Communication Skills and Concept Development with Visually Impaired Children who have Other Disabilities* (Revised Edition). London: Royal National Institute for the Blind.
- Ockelford, A. (1996). *All Join In! A Framework for Making Music with Children and Young People who are Visually Impaired and have Learning Disabilities*. London: Royal National Institute for the Blind.
- Ockelford, A. (1998). *Music Moves: Music in the Education of Children and Young People who are Visually Impaired and have Learning Disabilities*. London: Royal National Institute for the Blind.
- Overy, K. (1998). Discussion Note: "Can Music Really 'Improve' the Mind?". *Psychology of Music*, **25**, 97–99.
- Postacchini, P. L., Borghesi, M., Flucher, B., Guida, L., Mancini, M., Nocentini, P., Rubin, L. and Santoni, S. (1993). A case of severe infantile regression treated by music therapy and explored in group supervision. In: Heal, M. and Wigram, T., *Music Therapy in Health and Education*, pp. 26–31. London: Jessica Kingsley.
- Rauscher, F. (1998). Response to Katie Overy's Paper, "Can Music Really 'Improve' the Mind?". *Psychology of Music*, **26**, 197–199.
- Rødbrøe, I. (1997). The changing focus in developing communication with congenitally deaf-blind people. In: Rødbrøe, I. and Heyes, T., *Communication through Active Music* (video and booklet). London: Royal National Institute for Deaf People.
- Schwalkwijk, F. W. (1994). *Music and People with Developmental Disabilities*. London: Jessica Kingsley.

- Spychiger, M. (1998). Response to Katie Overy's Paper, "Can Music Really 'Improve' the Mind?". *Psychology of Music*, **26**, 199–201.
- Streeter, E. (1993). *Making Music with the Young Child with Special Needs*. London: Jessica Kingsley.
- Teacher Training Agency. *National Standards for Special Educational Needs (S.E.N.) Specialist Teachers*. London: T.T.A.
- Warnock, H. M. (1978). *Report of the Committee of Enquiry into the Education of Handicapped Children and Young People*. London: H.M.S.O.
- Waters, A. (1998). Response to Katie Overy's Paper, "Can Music Really 'Improve' the Mind?". *Psychology of Music*, **26**, 205–208.
- Welch, G. (1991). Visual metaphors for sound: A study of mental imagery, language and pitch perception in the congenitally blind. *Canadian Journal of Research in Music Education*, **33**, Special I.S.M.E. Research Edition.
- Wood, M. (1983/1993). *Music for People with Learning Disabilities*. Guernsey: Guernsey Press.